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26 JUL 1965

THE ADMINISTRATION OF BENGAL

UNDER

THE EARL OF RONALDSHAY, G.C.I.E.,

1917-22.



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ADMINISTRATION OF BENGAL

UNDER

THE EARL OF RONALDSHAY, G.C.I.E., 1917-22.

CHAPTER I.

The Reforms.

Arrival of Lord Ronaldshay.—His Excellency the Right Hon'ble LAWRENCE JOHN LUMLEY DUNDAS, EARL OF RONALDSHAY, G.C.I.E., took his seat as Governor of Bengal and President in Council on the 26th March 1917 and vacated it on the 23rd March 1922. His Excellency was President of the Executive Council and, until the inauguration of the new Legislative Council under the reforms scheme in 1921, was also President of the Legislative Council. On the Executive Council there were originally three members, two of whom belonged to the Indian Civil Service.¹ At the time when Lord Ronaldshay assumed charge the Hon'ble Mr. P. C. Lyon, the Hon'ble Sir (then Mr.) Nicholas Beatson-Bell and the Hon'ble Nawab Sir Syed Shams-ul-Huda were on the Council, but, during the greater part of the period before the introduction of the reforms, the Hon'ble Sir Henry Wheeler, the Hon'ble Sir (then Mr.) John Cumming and the Hon'ble the Maharajahbiraja Bahadur of Burdwan were the members. The Right Hon'ble Lord (then Sir Satyendra Prasanna) Sinha and the Hon'ble Sir Charles Stevenson-Moore were also members for part of that period. When Lord Ronaldshay arrived the war had had a definite effect in various directions. On the one hand it had seriously handicapped the work of Government by making financial economy an imperative necessity; on the other hand it had stimulated the industrial activities of the province to provide articles which could not be obtained overseas, a stimulus which ultimately led to a remarkable industrial awakening. It had led educated Indians to hope that an advance would be made in self-government, an aspiration which was recognised as legitimate by the subsequent materialization of the reforms scheme

¹ *Ibid* Appendix I

of Government. It had impelled the anarchical party to greater activity and to commit more murders and dacoities which Government were in the act of checking by means of the Defence of India Act. It had made Muhammadans anxious regarding the fate of Turkey, an anxiety which eventually found expression in the Khilafat agitation and its sequel, the non-co-operation movement which was so potent for violence, misery and the growth of a dangerous spirit of lawlessness. It had increased the cost of living, owing to the increased price of imported articles, which was later to develop into a general depreciation of the value of money, misunderstood by the people and vaguely ascribed by them to Government action or inaction. At the same time the province was ready for improvement in respect of such matters as local self-government, sanitation, public health, education and agriculture to which Lord Ronaldshay addressed himself in a serious endeavour to promote the welfare of the people despite the political pre-occupations of the period.

The Reforms.—The most striking administrative feature of the period of Lord Ronaldshay's administration was the introduction of the reforms scheme of Government. This scheme was initiated by the statement of policy made on the 20th August 1917 in Parliament, which amounted to a pledge to secure the progressive realisation of responsible Government in British India as an integral part of the Empire. The stages of the development of the details of the scheme were marked by the visit in 1917-18 of the Secretary of State to India; the Joint Report on Indian Constitutional Reforms (March 1918) of the Secretary of State and the Viceroy, usually called the Montagu-Chelmsford report; the visit in 1918-19 of the Franchise Committee and the Committee on the Division of Functions both under the chairmanship of Lord Southborough; the Government of India Act of 1919 and its previous consideration by a joint select committee of both Houses of Parliament; the King's Proclamation in December 1919 regarding the reforms and, finally, the introduction of the reforms scheme of Government in January 1921. All this investigation and consideration and the intermediate discussions aroused the liveliest interest amongst all races and classes of educated persons, official and non-official, and incidentally threw an unusual burden of work on the administration. Lord Ronaldshay himself framed in consultation with Sir Edward Gait, the Lieutenant-Governor of Bihar and Orissa, a minute in favour of a liberal measure of reform at the time the whole question was about to be submitted to Parliament; whilst in the development of the scheme no detail was too small for his consideration.

The reforms served to make a definite cleavage amongst politically-minded Indians into the two parties of Moderates and Extremists. When the Montagu-Chelmsford report was published the Moderates were unanimous in pronouncing the scheme to be a substantial instalment of responsible Government and an honest endeavour to meet the legitimate aspirations of educated India. The Extremists, on the other hand, at first would have nothing to do with it as they considered that it fell very far short of such aspirations. Then they attempted to absorb the Moderate party on the ground that after all there was little difference between their opinions, a trap which that party managed to avoid. Finally, the Extremists split on the question of non-co-operation and a few in Bengal refused to co-operate in the reforms. The Muhammadans considered that the original proposals did not give them a fair share of power and they demanded communal representation. The press reflected all these opinions, the discussions on the subject being raised to a higher level of debate than usual. The masses, on the other hand, were not interested in it.

Reforms—Administrative.—On the administrative side the general feature of the scheme was the adoption of the principle of dyarchy by which the functions of Government are divided vertically between "reserved" and "transferred" departments, the "reserved" departments being administered as hitherto by the Governor in Council responsible to the Crown but the transferred side being administered by the Governor acting on the advice of ministers who are elected members of the legislature and amenable to control by that body. In other words, in respect of reserved subjects such as law and order it is the Governor in Council who still says what should or should not be done. He is responsible to the Crown for his policy in such matters and he cannot transfer that responsibility to the Ministers or to Legislative Council. In respect, however, of the transferred subjects it is the minister who lays down the policy and controls the different departments. He is responsible to the Legislature and holds a position somewhat analogous to that of a member of the Cabinet in Great Britain. The position of the Governor is that he acts on the advice of the minister. Four members of the Executive Council, the Hon'ble Sir Henry Wheeler, the Hon'ble the Maharajahdiraja Babadur of Burdwan, the Hon'ble Mr. J. H. Kerr and the Hon'ble Sir Abd-ur-rahim were appointed by the Crown to have charge of the reserved departments and three ministers, the Hon'ble Sir Surendra Nath Benerjee, the Hon'ble Mr. P. C. Mitter and the Hon'ble Nawab Syed Nawab Ali Chaudhuri

were appointed by His Excellency the Governor to have charge of the transferred departments.¹ They took over charge on the 3rd January 1921. The main branches which were transferred to the ministers were Agriculture and Public Works² (excluding Irrigation), Local Self-Government and Public Health and Education, but the districts of Darjeeling and of the Chittagong Hill Tracts remained entirely in the charge of the Executive Council. These changes were accompanied by various necessary changes in the Secretariat such as the addition of assistant and deputy secretaries and the appointment of a secretary in a new department of Agriculture and Industries. Standing Committees of a few non-official members from the Legislative Council were also attached to certain departments. The ministers were at the outset severely handicapped by the serious financial difficulties of the province consequent upon the allocation of funds recommended by the Weston Committee.³ Retrenchment was the order of the day and no striking developments of their policy were therefore practicable.

Reforms—Legislative.—On the legislative side, the salient features of the reforms were the broadening of the franchise by the creation of an electorate and the establishment of enlarged legislatures, both central and provincial, mainly elected and non-official. In order to make the electorate of the Bengal Legislative Council as large as possible, it was, broadly speaking, decided that the necessary minimum qualification of a rural elector should be the annual payment of cess of not less than a rupee and of an urban elector the annual payment of taxes of not less than a rupee and a half. Forty-six of the seats so open to the electorate were given to the non-Muhammadan community and 39 to the Muhammadan community. The electorate for the general population amounted to slightly over a million persons, though enquiry has elicited the fact that few of them understood the purpose of the elections. The scheme is, however, educative. There were 28 other elected seats.⁴

The elections took place at the end of 1920. Out of 94 constituencies returning 113 members, 23 sent in unopposed returns for 30 members; in the remaining 71 contested constituencies 30 per cent. of

¹ Vide Appendix I.

² Vide Annex II for branches of the administration.

³ Vide Chapter V.

⁴ The other elected seats were distributed as follows—

Landholders	...	5	European Commerce	...	11
University	...	1	Anglo-Indian	...	2
European general	...	5	Indian Commerce	...	4

the electors voted, the percentage of voting being slightly better in non-Muhammadian than in the Muhammadian constituencies. There were 26 nominated seats.¹

The new Council therefore opened with a representation of 20 officials (four *ex-officio*), of whom 16 were Europeans and 4 Indians, and 119 non-officials, including the three ministers, comprising 16 Europeans, 10 Muhammadians, 61 non-Muhammadians and 2 Anglo-Indians. The Hon'ble Nawab Sir Syed Shams-ul-Huda was appointed by His Excellency to be the first President of the Council and the Council elected Babu Surendra Nath Roy to be its Deputy President. It was formally opened by His Royal Highness the Duke of Connaught on the 1st February 1921 with imposing ceremony.

Development of the new Council.—Apart from the legislative work,² which will be dealt with as occasion arises, the work of the new Council was largely directed to recommendations by way of resolutions and general criticism of the policy of Government. Some idea of its activities can be gathered from the fact that during 1921 notice was received of 505 resolutions, of which 157 were discussed and 1,293 questions were asked. During the life of the previous Council, which came into existence in 1916, 2,431 questions had been asked and 688 resolutions discussed. Its powers in the matter of finance were exercised in connection with the fixing of the salaries of the Deputy President of Council (under the Deputy President's Emoluments Act, 1921) and of the ministers (regarding which there was a keen discussion) and in motions for the reduction of grants. The most important reduction of a grant was a comprehensive cut of 23 lakhs under the head "Police" (a reserved subject) in the budget of 1921-22, Better counsels however prevailed later, and the amount was restored by the Council at a special session convened by request for that purpose. His Excellency accepted a number of proposed reductions on the "reserved" side, but exercised his powers of restoration on that side in respect of certain other necessary items. He necessarily has the power of restoration on the reserved side of the administration as the Governor in Council is responsible to the Crown for the proper administration of the subject concerned; and he cannot shift that responsibility by only pleading either in the domain of finance that the Council refused to vote the necessary

¹ The 26 nominated seats were distributed as follows:—

Indian Christians	...	...	1	Officials	...	...	2 (not less than)
Depressed classes	...	...	1	Officials, including			
Labour	...	...	2	...	...	...	20 (not more than)

² See Appendix III

funds or in the domain of policy that the Council disagreed with him. On the transferred side of the administration the Council has full power, but also incurs full responsibility to their constituencies. The work of the administration was materially increased by the consideration of resolutions, whether discussed or not, and by the framing of answers to questions.

Council of State and Legislative Assembly of the Government of India.—Two central all-India assemblies were also created as part of the reforms scheme. The Council of State is drawn from a franchise representative of the highest standards of wealth, rank, learning and experience. There are five constituencies on it belonging to this province, which returned six members. The Governor-General also nominated one official and one non-official from the province to that body. The Legislative Assembly is drawn from a franchise following in its general features that of the Bengal Legislative Council but with an increased minimum qualifying payment. There are 14 constituencies in it belonging to this province, which returned 17 members. The Governor-General also nominated two officials and two non-officials to it from Bengal.

Reforms—Financial.—On the financial side, the salient feature of the reforms scheme was the attempt to secure financial autonomy for the different provinces and for the Government of India by allotting to them, so far as practicable, the receipts accruing in respect of the subjects they administer subject to the payment of certain contributions by each province to the central Government. Thus the province of Bengal obtains the whole of the revenue from land-revenue, and the Government of India, subject to a certain modification, the revenue from income-tax. Land-revenue is a provincial subject, *i.e.*, administered by the province, and income-tax is a central subject, *i.e.*, administered by the Government of India though through the agency of the province. The attempt however in the case of Bengal gave rise to serious difficulties, which will be best understood from the review of the financial position during the period given in chapter V.

Speech at the inauguration of the Legislative Council.—The following words of Lord Ronaldshay in the speech which he delivered at the inauguration of the Legislative Council by H. R. H. the Duke of Connaught illustrate the momentous change which has been made by the reforms:—

“The occasion is an historic one and will, for all time, stand out as an arresting finger-post upon the road leading to that goal

towards which India is eagerly travelling. Sir, when in this connection we speak in the language of metaphor of a goal towards which we are travelling, the picture, which forms itself upon the screen of our consciousness, is that of some splendid edifice rising through the haze of distance upon the horizon and shaping itself in ever-clearer outline to our gaze as we travel towards it along a broad highway. We are, perhaps, apt to overlook the difference which exists between distance in time and distance in space. In the evolution of a nation, though the goal may be pictured, the gulf to be bridged before we reach it is one of time and not one of space; and every inch of the road thither has still, therefore, to be made. The survey may have been carried out and the direction posts set up, but the actual road must be builded day by day by the nation itself as it moves forward on its onward course, and upon those who lead the nation rests the responsibility for its safe construction. The responsibility is one not to be lightly assumed, for upon the wise discharge of it hangs the fate of countless numbers of their fellowmen. It is comparable to that of the Generals of an army who, though provided by their expert advisers with a safe survey of the ground to be traversed, are yet tempted to adopt a line of advance, apparently more direct but fraught with dangers to which they wilfully close their eyes. Wisdom and experience urge one course; impetuosity, ill-directed enthusiasm, possibly other motives as well, urge the other. The tests of their fitness to be entrusted with responsibility lies in their choice. Would the army which puts its trust in them, or would posterity forgive them if choosing fatefully and rashly, they were to lead it into an engulfing quick sand of tribulation and disaster?

Sir, those who are at once the representatives and the leaders of the people who are assembled here to-day have made their choice. They have accepted the alignment marked out for them along solid ground. And the task which now lies before them is the actual construction of the road. No easy one, but a great and worthy one, and one moreover in which the rapidity with which it is completed, will be commensurate with the nature of the workmanship put in. All the greater is the care required on account of the novelty of some of the tools now being placed for the first time in the hands of those to whom the work has been committed.

It is easy to give concrete illustration of this latter statement. For the vast majority of those who now exercise it, the franchise is a hitherto untried implement. Prior to this the members of the Legislature have been nominated thereto or elected by strictly circumscribed electorates. Generally speaking, the vote has been the

prerogative of a limited number of persons enjoyed by reasons of the special position which they occupied, such as membership of a Municipal or District Board or of a special association, such as a Chamber of Commerce or the University Senate, or of a special community, such as the great landholders of the Presidency. With such elections the mass of the people have had no concern. And the total number of electors of all classes who have had any share in returning members to the Legislative Council of the past has not exceeded 12,000. As compared with this, the persons entitled to return members to the Legislative Council which meets for the first time to-day, number approximately one million and twenty thousand a sufficiently dramatic indication of the extent to which power has been conferred upon the people. Equally significant is the revolution wrought in the composition and character of the Council itself. The former Council consisted of 53 members; the present Council of 139. Of the former body 28 members only, or a bare majority were elected; of the total of the present body 113 or 81 per cent. Of the former body a little over one-third were officials; of the present body 13 per cent. only. Such figures speak for themselves. But the immensity of the stride which has been taken towards the goal of responsible self-government cannot be fully appreciated without a reference to the complete change which has simultaneously been effected in the Executive Government. In place of an Executive consisting, apart from the Governor of two European officials and one Indian non-official gentleman, there has now been established an Executive of two European officials and five Indian non-official gentlemen; in other words, the Indian element in the Executive Government of the country has been converted from a permanent minority to a permanent and over-whelming majority. Further, of the five Indian members of the Government, three are elected members of this Council, and, in respect of the subjects which they administer including such vitally important matters as Local Self-Government, Public Health, Medical Administration, Education, Agriculture, the development of Industries, the Administration of Excise and of Public Works, stand *vis-a-vis* the Council in a position which, if not wholly identical with, is at least analogous to, that of members of the Cabinet to the Parliament of Great Britain. These are momentous changes the mere enumeration of which is, perhaps, sufficient to justify the emphasis which I have laid upon the necessity for the exercise of extreme care in the building of every successive foot of the road which is the task which now awaits us. My personal experience of the high devotion to duty and the broad and sympathetic vision of the officials with whom I am proud to have been associated in the Government of

Bengal during the past four years; of the intellectual ability, the courtesy and the warm-hearted generosity of spirit of the people of Bengal; and of the disinterested advice and the assistance which I have invariably received from the non-official members of my own community, encourage me to regard the future with high hope. The fact that this Council meets to-day in the second city in the whole vast Empire over which His Majesty holds sway, bears striking testimony to the nature of the contribution which the representatives of the European community can make to the common stock of our available resources. And, indeed, it would be difficult to conceive of a more effective combination of qualities than those of the two great communities now ranged side by side—the shrewd business acumen of the one and the inspired idealism of other. One thing only is necessary to render operative in this unique combination its tremendous potentialities—the will to succeed. It is given to every man to contribute something towards this, the supreme necessity of the day, the creating of a will to co-operate—a will to succeed. And for myself I joyfully dedicate the remainder of my term of service in Bengal to the furtherance of a steadily growing partnership between the Bengali and British races; and offer the hand of help and friendship to all who, inspired by a common purpose—the orderly progress of this land towards its appointed destiny—are prepared to work whole-heartedly for the effacement of all obstacles standing in the way of cordial co-operation in the supreme interests of the common weal."

CHAPTER II.

Political History.

Revolutionary crime.—During the previous administration there had been a grave increase of revolutionary crime in Bengal. The activities of the anarchists had increased and methods of murder had been adopted, the victims being usually police-officers who had gained an insight into the working of the anarchical movement or private persons who had in any way assisted Government in their war on revolutionary crime. At a later stage the revolutionaries in India had come into direct touch with the Germans and received money and were led to hope for arms from them. The result had been bolder and more energetic action by the anarchical party; fiery leaflets were distributed in large numbers, the number of political outrages increased, a peculiarly daring form of duceity by taxi-cabs was adopted and an attempt was made to raise funds by blackmail on a large scale. No year had passed without the assassination of one or more police-officers in Bengal. To cope with this activity the provisions of the ordinary law had been unavailing. The difficulties of their application were two-fold. In the first place, much of the evidence, including the numerous confessions made by persons who had actually taken part in the crimes, consisted of statements made to the police. Such statements are inadmissible under the provisions of the Indian Evidence Act. In the second place, there was a disinclination on the part of the public to come forward and give evidence against the criminals, a disinclination which was assisted or created by the activities of the revolutionaries in assassinating persons who helped the police. The powers under the Defence of India Act which had been passed to give Government the necessary powers to maintain the external and internal security of India, were therefore used for the detention of revolutionaries who endangered the internal security of India. The vigorous use of this weapon, and of Regulation III of 1818, the heroism of the police and the skill and judgment of the officers who had to deal with revolutionary crime then led to a very marked decrease of such crime in the period under review. In 1917, 1918 and 1919 there were only eleven, three and two outrages, respectively, but three police-officers were killed in attempting to arrest anarchists and a number of prominent revolutionaries were arrested and some significant seizures of arms and seditious literature were made. In

1920 the province could boast that it was free from open revolutionary crime, only unfortunately to find a different and more insidious and subtle species in its place.

Defence of India Act. In November 1917 Lord Ronaldsday made a statement to the Legislative Council regarding the Defence of India Act, in which he remarked as follows:—

“Over 200 persons dealt with under the Defence of India Act alone have confessed to definite complicity in a revolutionary movement; nearly 300 others are implicated by their associates, the evidence of their complicity being corroborated in every case by other evidence of an entirely independent character. Rather more than 200 others are implicated by their own incriminating statements, or by finds of arms or seditious literature or by the circumstances of their arrest, the evidence in nearly all of these cases being confirmed by information obtained from other sources. In the course of their investigations into this form of crime the police have made more than 60 finds of arms and ammunition and nearly 100 finds of seditious literature apart from revolutionary vows and leaflets. Evidence in regard to the use and custody of arms has been obtained against nearly 400 interned persons. The charges against a very large number of those against whom proceedings have been taken are, I am sorry to say, of a serious character. No less than 60 are charged with murder, and over 90 with abetment of, or preparations for, or plots for the same crime. Nearly 270 are charged with dacoity and over 70 more with abetment of, or preparations for, dacoity or with lurking to commit crime. Again as many as 67 of the persons interned are charged with steps taken to assist the King's enemies or to stir up mutiny in the army. I do not say for one moment that all those dealt with are guilty in equal degree. Certainly not. There are many who have been led to join the revolutionary movement under a misapprehension as to what they were doing. In many cases the regret which is often expressed by such men, for their past action, is no doubt perfectly genuine. And it is the policy of Government, deliberately adopted with a full knowledge of all the facts, steadily to release such men, as can in our judgment be set free, without unduly endangering the safety of society and the public peace. Men who have been guilty only in a minor degree and for whose good behaviour security can be obtained, have been set at liberty from time to time during the past year. During the past three months ending with 31st October, 34 persons have been released on guarantees for their good behaviour being given; and during the same period 21 persons who were interned

away from their homes, have been granted home domicile. These men are on their honour. It is up to them to see that they do not abuse the trust which has been placed in them.

Now I have one thing more to say. The administration of this Act is peculiarly distasteful to us. But it has been forced upon us by a grave necessity, and, however disagreeable our duty, it is one from which we cannot shrink.

We have taken the most careful precautions against the chance of our committing injustice by any action which we are driven to take by virtue of it. Every person dealt with under it is charged in writing with a definite offence, and is invited to write his reply. The whole of the evidence against him is submitted to a Judicial officer for his opinion. I do not believe the Act could have been administered with greater care or with more consideration for those against whom it has been employed. Indeed Government—and if I may say so, the public also—owe a deep debt of gratitude to the Hon'ble Mr. Cummings for the unfailing care, the unwearying patience, and the tact with which he has discharged the heavy duties which have fallen to his lot in this connection."

The above statement sums up the policy of Government regarding the détenus under the Defence of India Act, of which the most remarkable feature was a persistent and careful review of all the cases. By April 1918 upwards of 225 men who had been interned under the provisions of the Defence of India Act or under the provisions of kindred measures had been released, generally on security, and upwards of a hundred men who had been interned away from their homes had been allowed a home domicile. By the time of the King's Proclamation of the 23rd December 1919 the total number of State prisoners under Regulation III of 1818 had been reduced by nearly half and over 900 détenus had been released, with very few exceptions on security. In fact the number of détenus under the Defence of India Act was then only 141. In terms of the Act of Royal clemency in the King's Proclamation all the détenus were released in 1920. It may not be generally known that Government also endeavoured to obtain employment for those détenus who had reformed and that they were successful in a large number of cases.

The Rowlatt Committee.—The administration of the Defence of India Act aroused much hostility. It was strongly criticised and its repeal was strongly urged despite repeated assurances from Government as to the manner in which it was being administered. In fact, one section of Bengali opinion and of the press was either unable

or unwilling to recognise the existence of any organised revolutionary crime in the province, and in consequence they entirely failed to appreciate the necessity of the measures taken to combat it. Highly coloured and unwarranted accounts were published of the hardships to which the détenus were said to be subjected. Much capital was made out of the refusal of Government to bring the détenus to the courts, and a belief was spread abroad that, in many cases, the internments of revolutionaries under the Act had been based on insufficient evidence. A committee was accordingly appointed by the Government of India at the instance of the Government of Bengal in December 1917 under the Presidency of Mr. Justice Rowlatt, a Judge of the Supreme Court of Judicature in England, to investigate in the fullest possible manner all the evidence bearing upon the sedition movement in India. Their report completely justified the action of Government, proved the existence of a widespread revolutionary and criminal organization in India and demonstrated how unsuitable the ordinary law was for the situation. In Bengal alone between the years 1906 and 1918, no less than 311 outrages had been committed; over 1,000 persons had been accused but only 84 persons had been convicted. But, with the passing of the Defence of India Act and the operation of the rules under that Act to impose restrictions upon persons implicated in revolutionary movement, the outrages had fallen in numbers considerably. The committee, therefore, concluded that a permanent amendment of the law was necessary as the Defence of India Act would only last for six months after the final restoration of peace. Subsequently a special enquiry was held into all the cases of the Bengal détenus by a committee consisting of Mr. Justice Beachcroft of the Calcutta High Court and Sir Narayan Chandravarkar, an *ex-High Court* Judge of Bombay, who decided that in 800 out of 806 cases there had been every ground for detention; the remaining persons were discharged, not because their innocence was established, but because the orders against them were not in the opinion of the committee supported by adequate evidence. The policy of Government was therefore thoroughly vindicated; and the Government of India proceeded to put into execution the recommendation of the Rowlatt Committee by legislation in the beginning of 1919.

Satyagraha.—This legislation, commonly called the Rowlatt Act, though it was embodied in two laws, aroused great opposition which was led by Mr. Gandhi of the province of Bombay who, relying on the alleged superiority of "soul-force" over material might, instituted a passive resistance or *Satyagraha*

movement in order to compel the withdrawal of the laws. It was intended that every one should "refuse civilly to obey these laws and such other laws as the committee to be hereafter appointed may think fit". Though warned even by sympathisers that he was releasing forces of which he knew not the power, he persisted. Local committees were set up to educate the masses in the doctrine of passive resistance and the most extraordinary and inflammatory rumours, such as taxation to the extent of half of one's income, were circulated as to the actual intention of the Act. *Hartal*s were proclaimed. A *haral* means the cessation of all business, in particular the closing of shops, by way of mourning; whilst the efforts of agitators to secure such cessation of business are provocative of excitement and violence. The inevitable happened. The grave disorders in the Panjab are now history. In Bengal, though there was but little trouble at the *haral* of the 6th April 1919, a serious riot occurred in Calcutta on the 12th which had to be put down by the employment of armed force. Otherwise there was little excitement in Bengal, and that section of the press which had supported *Satyagraha* recanted after the disturbances in Calcutta, the minds of most people being at that time occupied by the abnormal rise in prices. Nevertheless, it is important, as *Satyagraha* was the precursor of the non-co-operation movement. Before dealing, however, with that movement, it is necessary to turn aside to the Khilafat agitation which was the immediate cause of non-co-operation.

The Khilafat agitation.—Muhammadan susceptibilities were excited in 1917 by the serious Bakrid disturbances in Bihar, and again in 1918 by an article in a Calcutta paper which used a phrase indicative of disrespect to the tomb of the Prophet leading to indignation meetings and to a very serious disturbance of lower class Muhammadans in Calcutta at the time of the Bakrid, which resulted in a lamentable loss of life, and had to be quelled with the aid of the military and the Indian Defence Force. They were also exercised in their minds as to whether they would get proper representation under the reforms scheme. But their main concern was the fate of Turkey during and after the war. At first they were somewhat reconciled to its fate as the Holy Places of Islam had been kept intact, but during the latter part of 1919 an agitation called the Khilafat agitation was started with the demand that Turkey and the Sultan or the Khalifat should be reinstated in the position which they had occupied before the war. The Muhammadan press became obsessed by the Turkish question and their protestations became more bitter as time went on. They found many sympathisers in the Hindu papers. The

agitation was supported by inaccurate history and wilful misrepresentation and despite the counter-propaganda of Government, it had its effect on the masses. At the same time Mr. Gandhi adopted the extraordinary course for a Hindu of identifying himself with it, a Muhammadan movement, and later on the 10th March 1920, he announced his intention of leading a non-co-operation movement so as to make the position of Government impossible in case the demands of the Moslems regarding the Khalifat were not met.

Non-co-operation—First appearance.—Non-co-operation was, so Mr. Gandhi stated, to be absolutely free from violence. It embraced the resignation of titles, the refusal of lawyers and litigants to attend the courts, the withdrawal of boys from schools, and ultimately a refusal to co-operate with Government in any form of activity. The boycott of foreign goods, the universal introduction of the spinning wheel and a national language were also advocated. At first, the movement was confined to zealous Muhammadans, but it gradually attracted certain Hindus who disapproved of the methods which had been employed in quelling the disturbances in the Punjab in 1919 or to whom Mr. Gandhi's personality made a strong appeal; and it certainly absorbed the revolutionaries. The movement began in Bengal in February 1920 with a conference held by the Bengal Khilafat Conference Committee in the Calcutta Town Hall. The new tenets of the non-co-operation movement were accepted, and it was decided to hold a *hartal* on the 19th March 1920, and to send a telegram to the Viceroy and the King-Emperor declaring that the Moslems of India would find it impossible "to keep their secular loyalty intact" unless the demands regarding the Khalifat were accepted. Before the 19th March milder counsels prevailed. Though it was clear that the agitators had by then created an organization in Bengal by which co-ordinated action was possible, the *hartal* was only a qualified success and as an exhibition of soul-force it failed to impress anyone; and the impudent telegram as originally worded was only despatched from five districts. A second *hartal* was declared for the 1st August 1920, but this was a failure, and there was considerable divergence of opinion as to the policy of non-co-operation. The Bengal extremist leaders were in favour of a modification of non-co-operation, but they were out-voted at the special meeting of congress held in Calcutta in September 1920. In fact, up to the end of 1920, the movement which was not indigenous to, had been a failure in, Bengal. Some intending candidates refused to stand for the Legislative Council, a few honorary magistrates and subordinate police-officers resigned, and, in one case, a title was resigned, but the general feeling of the people was apathetic.

Change in non-co-operation.—At however the beginning of 1921 a change took place and the movement began to obtain a firm footing in the province. This change was due to the success of the extremist non-co-operators at the Nagpur Congress which was held at the close of the year 1920 and to the complete conversion of a prominent Bengali extremist to the movement. At the same time the character of the movement changed into an avowed attempt to paralyse and destroy the existing Government by means of non-co-operation; *swaraj* (complete self-government) was proclaimed as attainable within a year; and the Khalifat was forgotten for the time being. The movement was engineered and fostered by numerous meetings and violent speeches, by the activities of agitators undisguised or in the guise of *fukirs* and *sadhus* stirring up trouble in the villages, by the formation of corps of volunteers and by a campaign of wilful misrepresentation and intimidation. It also received a stimulus from the economic pressure caused by the high cost of living and from the general industrial discontent. Nominally non-violent, it was provocative of violence, serious disorder, loss of life and the growth of a dangerous spirit of lawlessness.

The year opened with a general strike of students. The authorities of certain colleges in Calcutta, with a view to their nationalization and on a promise from a prominent non-co-operator to bear all deficits before the changes were introduced, agreed to withdraw their institutions from the Calcutta University system. The demand for the nationalization of colleges then started in other colleges; students withdrew in large numbers from them and excitement rapidly spread. The strike was not, however, universal in Calcutta; the conduct of the students of the Presidency College, despite the persistent annoyance of non-co-operators, was unexceptionable. But almost all the Calcutta colleges were closed and the students dispersed to their homes, in order that their parents might bring a salutary influence to bear upon them and in order to relieve unaffected students from the daily and intolerable strain. Outside Calcutta, the non-co-operation movement in colleges was practically universal, though in varying degrees of acuteness; it also found an echo in numerous schools. Eventually, the excitement died down for lack of stimulus, when it had run its course and the national colleges promised by the non-co-operators did not materialise. The great bulk of the students remained unaffected, but the excitement has told on their attendance in various classes of institutions.

This strike was followed by a series of industrial strikes culminating in the engineering of the exodus of coolies from the tea-

gardens of Sylhet and the purely political strikes on the steamer and railway lines in Eastern Bengal called as part of the general *hartal* declared in connection with that exodus. In both these cases the efforts of the non-co-operators were productive of much misery. The strikes failed, as the men had no legitimate cause for complaint; many of them realized too late, that they had lost their means of livelihood, and that in return the non-co-operators had nothing to give them. Meanwhile the general public were put to considerable inconvenience; and many publicists of varying shades of opinion were led to denounce the inducement of strikes for political ends. The case of the exodus of coolies was even more pathetic, as they spent what little money they had and arrived in Bengal in varying stages of poverty unable to proceed any further to their homes without the assistance of private charity. They were a danger both to themselves and the public from disease and epidemic, a danger which, despite the efforts of Government to mitigate it, was intensified by the conduct of the local non-co-operators. There was great suffering; many unnecessary deaths occurred; and many became homeless beggars.

Outbreaks also occurred in jails. There was a serious outbreak in the Central Jail at Rajshahi where the non-co-operation rumour had spread that the British Government had come to an end and that all prisoners were to be released. On the 24th March 1921, 669 out of 969 prisoners escaped. The majority were however re-captured; the two ringleaders in the conspiracy were sentenced to 18 months' rigorous imprisonment each, and the rest were also suitably punished. Outbreaks occurred subsequently on a smaller scale in the sub-jails at Sirajganj and Netrokona in the districts of Patna and Mymensingh. There were also conspiracies in other jails which were suppressed in time.

Other manifestations of the movement were the agitation against village self-government in the district of Midnapore, the picketing of drink shops (this was done ostensibly in the name of temperance but really with the object of diminishing the revenue of Government), the opposition to the beginning of settlement operations in the districts of Bogra and Birbhum, and early in November 1921 an attack on the police by a Khilafat mob in Howrah leading to a serious disturbance in which several persons were killed and wounded. The boycott of foreign goods was given a temporary impulse and there were some bonfires of foreign cloth, but it was not popular. Attempts were made to undermine the loyalty of the police, but with negligible results. Amongst the chief incidents of the movement were the attempt to boycott the visit of His Royal Highness the Duke of

Connaught at the end of January 1921, an attempt which was only partially successful as there were a fair number of spectators on the day of his arrival; the *hartal* of the 17th November 1921 which, from the point of view of non-co-operation, was very successful, as the public life of the city of Calcutta was entirely paralysed; and the unsuccessful attempt to boycott the visit of His Royal Highness the Prince of Wales.

Government attitude towards non-co-operation.—At first attempts were made by Government to check the spread of the movement by the ordinary law, and loyalist leagues were formed and meetings held to expose the fallacies of the movement. But the progress made on these lines was disappointing and by the month of November 1921 the movement had become dangerous; it was firmly and widely established; the inevitable accompaniment of the movement had been violence, and it was concentrating on the masses, who under the influence of constant misrepresentation and agitation were getting out of control. Moreover, the policy of civil disobedience, which Mr. Gandhi defined as a "civil revolution, which wherever practised, would mean the end of Government's authority and open defiance of Government and its law" was accepted by the all-India Congress Committee early in that month. More active steps were therefore taken. Control was exercised over the holding of meetings and processions in Calcutta and in the district of Howrah; those corps of volunteers, whose interference with the law-abiding public had become pronounced were proclaimed as unlawful associations under Part II of the Criminal Law Amendment Act, 1908; more numerous arrests were made and the local leaders were apprehended and sent up for trial. At the same time the citizens of Calcutta formed a Civil Guard, whilst an anti-*hartal* committee was established to take precautions for the provision of public services in the event of *hartals* and to initiate counter-propaganda against the campaign of intimidation.

In addressing the Legislative Council on the 19th December Lord Ronaldsday spoke as follows:—

"Now let me say something on the subject which is uppermost in every one's minds, namely, the unhappy situation which has recently arisen. I am not sure if the motion to be moved is to be regarded as an attack upon the broad principle on which the policy of Government is based, or whether its purpose is to criticise the manner in which the policy itself has been carried out. If the latter is the object, I have no complaint against the Council. Indeed, I should be the last person to suggest that criticism of the way in which effect had been given to the policy of Government

was not an altogether proper function of the Council. Government has no reason to regard temperate and reasoned criticism as anything but advantageous. It places Government in possession of the views of the Council and it enables Government itself to explain its action and to disabuse the public mind where necessary of many ideas which are based on the false rumours and exaggerated statements which inevitably gain currency at times of excitement such as the present. If, on the other hand, the motion is intended to be an attack on the broad principles upon which the policy of Government rests, then I confess that I should feel that I had good cause for complaint. Let me explain. The policy of Government was set forth by me when addressing the Council on November 21st. The policy seemed to me to rest upon an unassailable foundation. It was in fact this and nothing more than this—the discharge of its primary duty of securing to the law-abiding public the liberty to pursue its lawful business and pleasure unmolested. At the time when I made this statement of policy there were certain organizations known as “volunteer corps” which for a considerable time past had been becoming steadily bolder in their interference with the liberty of the law-abiding public. I informed the Council of the action which Government had been driven to take, namely, that of declaring these corps to be unlawful associations under the Criminal Amendment Law Act of 1908. I added that Government felt obliged to exercise control over the holding of meetings and processions in certain areas, and, finally, that it must take steps against any one deliberately defying the law. These briefly are the broad principle on which the policy of Government rests; and I certainly received the impression from the debate which ensued that these principle were fully endorsed by the Council. Before Government took the action to which I have referred I and my Government had been receiving complaints from peaceful citizens in all parts of the province of intimidation and boycott. These complaints had been becoming more and more insistent. I was asked, was Government no longer willing to protect the public from this form of molestation? And I was urged to take action against the agencies by which this particular form of violence was being practised. These complaints had become so numerous that I did not think it necessary when addressing the Council on November 21st to give any narrative of events leading up to the situation which compelled us to take action. I thought they were too well-known. It seems, however, that there are many who are not fully aware of what has been happening or who have failed to appreciate

the real significance of events. Let me, therefore, place before you, without heat of any kind, a brief outline of events. I will not go further back than October last. At the beginning of that month a manifesto, signed by Mr. Gandhi and a large number of other prominent non-co-operators, laid it down that it was the duty of every Indian soldier and civilian to sever his connection with Government. There followed two important developments—an intensive campaign to undermine the loyalty of the police and a rapid development in the activities of "volunteer corps." Alongside of these two significant developments was to be observed a rapid increase in open lawlessness and defiance of constituted authority. There were breaches of the peace in Howrah and Calcutta which are within the recollection of all. But such episodes were not confined to Calcutta. All over the Presidency persons were moving, stirring up disaffection among the masses. This process was assisted by an intensive campaign of highly inflammatory speeches which had been in progress for some months past. Between the beginning of June and the middle of November, I received reports of no less than 4,265 meetings held in different parts of the province. I could quote passages from these speeches which are so inflammatory, so violent in their abuse, that they would shock the Council. I refrain from doing so, for the sole reason, that I do not want to excite feeling unnecessarily. But I can assure the Council that, addressed, as in nine cases out of ten, these speeches have been, to audiences made up of the illiterate and emotional masses, they could have but one result, namely, that of spreading broadcast feelings of hatred and disaffection and of goading the people to violence. And that, indeed, has already been the actual result. Assaults on Settlement officers have taken place. Government servants have been threatened and boycotted. Now let me return to Calcutta; and I take the events of November 17th to illustrate the state of affairs which had been reached. The life of the city was paralysed. Were the police provocative? Certainly not. On the contrary the almost universal complaint made to me was that the police remained inactive and refrained from making arrests. Now let us consider *this* question. Did the public desire this paralysis of the normal life of the city? Did the people agree to suspend their ordinary activities voluntarily? Most assuredly not. Most bitter were the complaints made to me by Indian and European alike of the compulsion which was applied to restrain them from proceeding about their lawful business. I was told by the non-co-operation press that I was the victim of a disordered imagination when I

believed that intimidation was employed. Well, if this statement of the no-co-operation press is true, what follows from it? It follows that a large number of gentlemen, Indian and European, whose good faith I have never had the smallest reason to doubt, have been guilty of a conspiracy to make false statements to me. Such a supposition is too fantastically absurd to be worthy of a moment's consideration. Why, there is a case before the courts at this moment in which an Indian gentleman charges a number of the members of the Khilafat committee with intimidation of the most violent and disgraceful kind. I do not comment on the case since it is *sub-judice*; I merely state the fact. And, indeed, are there not members of the Council itself who can prove from personal experience that this is not an isolated case? It is these unlawful activities that decided Government to proscribe these corps. If they had confined their activities to selling *khaddar* and to asking shop-keepers politely not to do business on any particular day, I should never have dreamed of proceeding against them. But we know quite well that that was not the case. Picketting was resorted to, to an extent which constituted an intolerable interference with the liberty of a number of perfectly law-abiding persons. And bitter were the complaints of a large class of Indian traders that they were being compelled against their will to adopt a course which they did not wish to adopt. Many forms of intimidation were practised. And last, but not least, these corps usurped the functions of authority and claimed to control the life of the city. Was it to be wondered at, if the unruly elements in the population, seeing the authority of the police thus challenged, thought that the times were favourable for the play of their lawless instincts? Stone-throwing at innocent persons became common; vehicles were held up and compelled to deposit their fares, and there was general talk of a *Quonda Raj*.

We have been criticised for placing military pickets in the town. Had we no grounds for doing so? I have already told the Council of one case of alleged violent intimidation which throws a somewhat lurid light on the claims of some at least of those associated with the movement to non-violence. I have now to inform the Council of the discovery on the night of December 8th of a number of sinister weapons concealed in an untenanted house in the heart of the town. The nature of these weapons left little doubt as to the sort of use to which they were intended to be put—swords ingeniously concealed in the handles of umbrellas, daggers of a peculiarly vicious type, *tulwars* and jars of acid. Very well, then I would lay stress upon this—that with so many recent

of rioting in the streets of the city fresh in one's mind, and with these further evidences of the sort of activities which were in progress at the movement, it was not unreasonable as a precautionary measure to have recourse to a limited number of military patrols. These patrols were withdrawn as soon as the necessity or their use seemed to the responsible authorities to have passed, and, as a matter of fact, they were only in use altogether on a portion of two days. But it is not possible to say that occasion for the employment of troops may not again arise if incitements of violence continue. Only three days ago an Urdu manuscript leaflet was found posted up in the city of which the following is a translation:—

“What are you thinking about only? Just come face to face with your opponent. Let yourself be cut to pieces, even to death, but do not let any loss come to the Khilafat. Do not look towards Bagdad, neither do you look towards the army, but kill your enemy right and left. Do not let any of your enemy to be left unkilld if you see him and do not think that you are alone, because you are being helped by Imam Mehdi, who is standing in front of you. Call him. Just fly a flag in your hand and cry out *K'hoda, K'hoda*, beat a drum in the name of Din Muhammad throughout the lanes.”

These are things which Government cannot ignore. Then complaints have been made as to the behaviour of the Civil Guard. Well—the Civil Guard was not created by Government; it came into existence as the result of spontaneous action on the part of European and Indian non-official gentlemen—action, I may observe incidentally, which in itself provides additional proofs of the serious nature of the interference with the liberty of the people of which the non-co-operators were guilty. Government agreed to regularise this body by conferring upon its members certain powers under the Police Act. Such, then, being the origin of the body, it is not altogether surprising if, in the rush of recruits to join, some unsuitable persons were enrolled. As soon as I received complaints of the conduct of individual members I enquired into the matter and, as a result, strict instructions have been issued by Government with a view to guarding in future against incidents such as those of which I have received complaint. For example, instructions have been issued that powers under the Police Act should be conferred only upon persons of known respectability. Further, that members of the Force should act under the orders of their patrol leaders only, and that independent action of individual members is not wanted and can only lead to misunderstandings. Instructions have

also been issued to guard against the possible misuse of firearms in the case of persons entitled to carry them in their private capacity. Such arms, for example, are only to be carried on duty with the authority of the patrol leader which will only be given for good and sufficient reasons to men of known responsibility.

I am quite ready to believe that there have been complaints against individual members which may have been well-founded, but every possible precaution has now been taken to guard against this in future and I would express my unqualified admiration of the unselfish manner in which so large a number of respectable citizens have thus come forward voluntarily to take their share in the none too easy task of maintaining law and order in this city.

Then complaint has been made that trials have been largely held *in camera*. I have enquired into this and I have been informed that in three cases the court has been cleared by the Magistrate by virtue of the right vested in him by clause 352 of the Criminal Procedure Code, and I have been informed that this course was only taken by the Magistrate because he was unable to proceed with the trial owing to the demonstrations which were taking place in court.

Then I have received complaints of ill-treatment of individual prisoners. The case which has attracted most attention was that of the son of Mr. C. R. Das. As soon as this case was brought to my notice I ordered an enquiry and called for a medical report. Perhaps I had better read the report of the medical officer.

"I have the honor to state that I have made a very careful examination of the person of Chiranjivan Das and found no marks or bruises of any kind except a healed scar between the thumb and fore-finger of the right-hand which the prisoner said was caused by an injury received about a month before. There was no injury on the head. The allegation that his arm was twisted so much that it fairly came to the point of breaking would have necessitated such force as to leave some marks or bruises behind. There were no such marks."

It will be clear from this and various other episodes that many false statements and much exaggeration find their way into the public Press at a time of excitement like the present, and I would beg the members of this Council not to assume that everything which they read in the newspapers or everything which they hear must necessarily be true.

the massacre of the whole police force of a thana in the United Provinces, led Mr. Gandhi to postpone his proposed programme of general civil disobedience. Matters then apparently began to quieten; and there was very little excitement when Mr. Gandhi was arrested in March.

The War.—Lord Ronaldshay's administration covered the last nineteen months of the war when Bengal was called upon with the rest of the Empire for special efforts in the provision of men, money and material. Europeans rallied to the call to arms with enthusiasm, whilst men in Government employ were allowed to go in proportions which were compatible with the needs of the administration. A cenotaph was erected by public subscription to the men of Calcutta who had fallen in the war and it was unveiled by His Royal Highness the Prince of Wales in 1921. The investments of the province in the two war loans of 1917 and 1918 were considerable. It is not, however, out of place to give a full list of the contributions of Bengal towards the war dealing incidentally with the main features of the period. Such a list will be found in appendix IV, which is substantially complete so far as all events as Indian effort is concerned. From this list it will appear that the Presidency strongly supported established funds and institutions and that it also exerted itself in the development of organizations and funds along lines of its own. Calcutta was by far the largest contributor under all heads, and the special efforts made by Europeans in that city were numerous. Of these, those which evoked most enthusiasm were perhaps the "Lady Carmichael's Bengal Women's War Fund" and the "Statesman Calcutta War Fund", the former of which developed a remarkably efficient organization for the manufacture and distribution of war gifts on a large scale. Indian patriotism found expression in special efforts which grouped themselves mainly round the ideas of sending an Indian Medical Corps to Mesopotamia and of sending to the front the Bengali regiment. The former project, which belongs to the previous administration, fell short of complete realisation largely owing to the ill-luck of a storm at sea.

The Bengali regiment.—The nucleus of the latter project, the Bengali regiment, had been created in the time of Lord Carmichael by the raising of the Bengal Double Company in the year 1916. In 1917 it was decided to raise two more companies and thus form a complete battalion. Special arrangements were made for recruitment, and, finally, in the autumn of 1917, the battalion, designated the 49th Bengalies and known as the Bengali regiment, left for Mesopotamia and Baghdad. Recruitment for it continued in 1918, but in 1920 it was disbanded after the war.

Indian Defence Force.—The Indian wing of the Indian Defence Force, the Calcutta University Corps and the Bengal Light Horse, branches of that force, both of which were sanctioned during the period and which proved popular, are also instances of voluntary Indian contribution in man-power. After the war the formation of the 2nd (Calcutta) Battalion of the University Training Corps and the 1st (Territorial) Battalion, 94th Russell's Infantry, was sanctioned for Indians under the Indian Territorial Force Act, 1920; and a beginning was made in working out the organization. The European branches of the Indian Defence Force supplied continuous drafts for three months training at Poona and they assisted the military authorities generally by the provision of men for guard duty at the Calcutta Fort and the Kidderpore Docks during the war; they were also called out for duty in connection with the riots of September 1918 and were complimented on their behaviour. In 1920 the Indian Defence Force was replaced by the Auxiliary Force created out of the older volunteer forces.

Contributions of Native States.—The two Native States made noteworthy contributions. The late Maharaj-Kumar Hitendra Narayan of Cooch-Behar went on active service to France, and His Highness the Maharaja Bahadur made large donations towards the expenses of the war and for the relief of those who suffered by it. His Highness the Maharaja of Tripura besides contributing an ambulance car for France and a motor launch for Mesopotamia also made large cash donations.

Provision of non-combatants.—A noticeable feature of the list is the large provision of non-combatants made by the province. Before the commencement of the period a continuous supply of lascars and skilled and unskilled labour for overseas work had been kept up, but it was not till July 1917 that really systematic recruitment was undertaken. Thereafter labourers and followers began to come in considerable numbers both from Calcutta and outside it. For instance, in the year 1918 over 20,500 men were obtained from Calcutta alone. A number of prisoners in jails volunteered for service as sweepers, dhobis and artisans in Mesopotamia. Lascars deserve special mention as they did yeoman service in the merchant service; in the year 1918 no less than 13,000 men were sent to out-ports.

Minor contributions.—There are other minor contributions not adopted to tabulation, which therefore find no place in the appendix, such as the provision by jute and shipping firms of miscellaneous services by granting transport and other concessions and making gifts of material. The St. John's Ambulance Association maintained a

constant supply of medical and surgical accessories for the hospitals at the front. The list does not, of course, include the material which the province supplied in large quantities such as jute, quinine, jail-manufactured articles like blankets, bandages, etc., timber for the Munitions Board, etc.

Peace.—It is to the credit of the press that throughout the war its attitude regarding it requires little criticism, though it was ultimately found necessary to create in 1918 a publicity board for the dissemination of correct news regarding the war. The board published a weekly journal in Bengali called the *Satyasamachar* which had a circulation of over twenty thousand copies. Both the public and the press received the cessation of hostilities on the 11th November 1918 with genuine satisfaction and relief. The formal public announcement of peace was made on the 19th July 1919, the date fixed for the celebrations in England. They did not, however, take place in Bengal till November 1919, when the various functions passed off quietly. Two thousand three hundred and thirty-eight prisoners were released on the 19th July 1919 from the jails in Bengal; and partial remissions of sentences were granted to 8,000 others.

Bengal Employment and Labour Board.—In January 1919 the Bengal Employment and Labour Board was started to deal with the resettlement in civil life of Anglo-Indian and European officers discharged from war service as well as to assist discharged Bengali volunteers in finding employment. It secured employment for 392 persons, of which 367 were Government appointments. It was dissolved on the 31st March 1920, but its activities were taken over by the Political Department.

Hostile aliens.—Hostile aliens in Bengal continued to be interned at the Civil Detention camps, while a few, who were released on parole, were allowed to live under supervision at their places of residence. In December 1919, however, such of the German and Austrian déteenus who were not exempted were repatriated, and those exempted were released.

The Bengal (Aliens) Disqualification Act.—Two enactments were passed by the Bengal Legislative Council closely connected with the war. The first was the Bengal (Aliens) Disqualification Act, 1918 (P.C. III of 1918), of which the object was to prevent persons, not being British subjects or subjects of any State in India, from voting at elections or sitting as members of local bodies in Bengal and from holding responsible offices under those bodies.

The Indian Red-cross Society Act.—The other enactment was the Indian Red-cross Society (Bengal Branch) Act, 1920 (B.C. VIII of 1920), the last Act passed by the old Bengal Legislative Council. It provides for the administration of various moneys, properties and gifts received in Bengal from the public during the war for the purpose of medical and other aid to the sick and wounded and for comforts to troops and other purposes, which up to the time of the passing of the Act had been held in trust for the Bengal Women's War Fund and the "Our Day" Fund. This was a private Bill introduced by Sir Robert Watson-Smyth.

Chittagong Hill Tracts.—The Chittagong Hill Tracts had hitherto been treated as a district under the administration of the Political Department of Government, and their administration was in the direct portfolio of Lord Ronaldshay. On visiting Chittagong in 1917 he found, however, that matters required investigation in the Hill Tracts. The substitution of territorial for tribal administration in these backward tracts, the extension of settled cultivation amongst the hillmen and the general advance of civilisation had raised many new problems and had rendered necessary some development of the administrative system. Mr. F. D. Ascoli, I.C.S., was accordingly placed on special duty to enquire into the whole question and he submitted a report which dealt fully with every aspect of the administration. The main defect of the administration was the want of a proper revenue system. Lord Ronaldshay accordingly decided to introduce a proper revenue system, to substitute a member of the Indian Civil Service as Deputy Commissioner for the Superintendent, who had hitherto been a member of the Indian Police Service, and to divide the district into three subdivisions corresponding to the chiefs' circles. The necessary amendments were made in the Chittagong Hill Tracts Regulation I of 1900 by Regulation IV of 1920; and the new revenue system is gradually being introduced. The tracts are now administered by the Revenue Department on the reserved side of Government.

Native States.—His Excellency the Governor visited both the Native States of Cooch-Behar and Tripura (previously called Hill Tippera). On the 1st January 1919 the title of "Maharaja" was conferred upon His Highness the Raja of Hill Tippera as a hereditary distinction.

The Press.—There was a continued increase in the number of periodicals, both English and vernacular, published in the period. In the year 1917-18 they numbered 320, of which 162 were in Bengali and 105 in English. By March 1921 the number had increased to 406,

of which 209 were in Bengali and 130 in English. The majority were published in Calcutta. The Indian press reflected Moderate, Extremist and Muhammadan opinion on such subjects as reforms, revolutionary crime and non-co-operation in the manner already noticed. Otherwise its attitude was chiefly remarkable for its inability or unwillingness to recognise the goodwill of Government in their policy, whilst much uninformed criticism was levelled at certain Government departments such as the Agricultural Department. Some were very virulent in their hostility to Government and in an attempt to promote racial hostility. Many papers also continued to disseminate information which when not false was so garbled as to make it discreditable to Government. Accordingly an experiment was made in the year 1920 of the appointment of a Director of Information, one of whose duties was to supply correct information to the public and more particularly to the press. The reformed council, however, voted against the grant for his appointment and it was discontinued in 1921. Subsequently, however, a Publicity Officer was appointed. Action was taken under the Indian Press Act, 1910, in several instances. Certain books, newspapers, pamphlets and leaflets were forfeited. Security was demanded from several presses and newspapers and it was furnished in over half their numbers. In a few cases the security was ordered to be forfeited. The appointment of General Press Censor made during the war ceased to exist at the end of February 1919, but the Muhammadan Press Censor continued to work throughout the period.

Employment of Counsel for the defence in capital offence cases.—It is convenient to include in this chapter some notice of civil and criminal justice. Two points call for remark during the period. The first was the issue of orders in the year 1918 that every person charged with committing an offence punishable with death should have legal assistance at his trial and that the courts should provide counsel for the defence unless they certify that the accused can afford to do so.

Extension of system of trial by jury.—The second was the extension in July 1918 of the system of trial by jury, which had been in force in twelve districts, to the remainder of the province with the exception of the non-regulation districts of Darjeeling, Jalpaiguri and the Chittagong Hill Tracts.

CHAPTER III.

Police and Jails.

Police.—Lord Ronaldshay followed with deep interest, sympathy and appreciation the work of the police forces of both Bengal and Calcutta and viewed with keen satisfaction the steady advance in their standards of efficiency and integrity. Not only had he a keen appreciation of the difficulties they had to combat in dealing with dangerous dacoity, anarchical crime and crime due to economic, industrial or political unrest, but he had a strong sympathy with the police force on account of the criticism which was so often levelled against it by an uninformed press or public. This attitude of the public he strove to change, for he strongly felt the necessity of co-operation between the public and the police; and he, therefore, appealed to both parties to foster the growth of mutual assistance and goodwill. There are indications that these appeals have borne fruit. Though it was at one time conspicuous by its absence amongst Indians in the case of the non-co-operation movement, there is evidence of more and more assistance being given to the police in particular, by the formation of organised defence parties, joint patrols or union watch committees for the prevention of crime under the guidance of the local police authorities. Further, more graduates and other educated men are now being enrolled in the force. In 1921 police became a reserved subject under Sir Henry Wheeler.

Bengal Police.—Owing mainly to the financial stringency caused by the war, the development of the Bengal police in many needed directions was arrested. The principal change took place in the pay of all ranks. That of the superior ranks was improved, as a result of the proposals of the Public Services Commission, whilst that of the subordinate ranks was substantially increased on account of the rise in the cost of living, which was having a very adverse effect on the recruitment, and numbers of resignations, of constables in particular. The increase in the pay of constables led to a diminution in the number of resignations and an increase in the proportions of Bengalis to up-country men recruited. The adequate housing of the force has been, for many years, one of the urgent needs of the department; the majority of police-station buildings and staff quarters are still in a very unsatisfactory condition, insanitary and dilapidated.

Though a large amount was expended annually on new buildings, the increased cost of building materials stood in the way of any substantial progress, whilst in 1919 much of the money urgently required for further improvement had to be diverted to make good the damage done by the great cyclone which occurred in that year.

Amongst interesting changes which have taken place during the period the establishment of a detective school at Howrah, which is the only institution of its kind in India, to train a limited number of sub-inspectors and constables in progressive and suitable methods of investigation and the establishment of a detective department in the district of the 21-Parganas and also in the Eastern Bengal Railway and the East Indian Railway may be mentioned.

The average figures for true cases of serious crime do not exhibit any remarkable change from those of the previous quinquennium. But the high water mark of crime against property was reached in the year 1919 when the abnormal economic conditions which prevailed led the poorer classes to the looting of grain and other foodstuffs. There was also growing unrest amongst the labour population, due partly to the political agitation referred to in the last chapter and partly to economic causes which are dealt with in chapters IV and VI. For this reason the strength of the armed police in certain places was increased. Throughout, the police have done good work in fighting crime. They have been congratulated several times by Lord Ronaldshay on their successful efforts, particularly at the annual police parades at Dacca when His Excellency distributed rewards to members of the force who had done specially good work as well as from the year 1919 to members of the public who had been of material assistance to the force. These parades were much appreciated by the police force and created some interest in the minds of the general public.

River Police.—The scheme for the provision of river police sanctioned in 1911 was further developed by the opening in 1917 of a Ganges division with five police-stations and some addition was made to the number of boats and launches. But the financial position of Government rendered any larger expansion impossible, and consequently, owing to the inadequacy in the number of launches and the want of search lights, the patrol of the waterways of the province was greatly hampered. Nevertheless, the utility of the river police patrols has been acknowledged by the various chambers of commerce.

Chaukidars.—Somewhat varied reports were received from districts on the work of the rural police (chaukidars), and there were well-founded complaints of the inadequacy of chaukidars' and daffadars'

pay. Where the Chaukidari Act is still in force the maximum is fixed by that Act and its amendment is under consideration. It is only where the chaukidars have been brought under the union boards established under the new Village Self-Government Act that a higher rate is permissible.

Military Police.—An addition of a company was made to the Bengal Military Police. Their designation was changed by the Eastern Frontier Rifles (Bengal Paltalion) Act, 1920 (B. C. II of 1920), to that of "Eastern Frontier Rifles (Bengal Battalion)". This Act also removed the anomaly involved in the application of the Eastern Bengal and Assam Military Police Act, 1912, which was intended for the combined Eastern Bengal and Assam military force, to two distinct forces in Bengal and Assam, which have taken the place of that force since the reconstitution of the provinces in 1912. A number of the officers and men of this force were on military duty during the war and their services were commended by the commanding officer under whom they served in the following words:—

"The men of the Military Police Battalion, Dacca, have never failed to respond to every call where courage and discipline have been required, and their readiness to submit to discipline and to face danger and hardship have always been remarkable".

Calcutta Police.—Just as in the case of the Bengal police force, the pay of all ranks of the Calcutta police were improved during the period of Lord Ronaldshay's administration. But several other reforms were inaugurated owing to the growing complexity of the police administration of the city of Calcutta. The city began with an administration based on that of the Bengal police; it has steadily outgrown the potentialities of such a system, and this growth has been met by an adaptation to that obtaining in European cities of similar size and activities and therefore by increased specialisation. For instance, when in the year 1919 the control of hackney-carriages was transferred entirely to that of the Commissioner of Police, Calcutta, a specialised police department designated the public vehicles department was created to deal with the rapid rise in the number of motor vehicles which had occurred since the armistice and the steady increase in the number of traffic offences. It had at its head a Deputy Commissioner of Police solely responsible for this branch of control, who had been placed on special duty in London to study the details of traffic control in that city. Later on, in 1921 after a strike of motor drivers and with the increase in the number of motor cases, a special court was opened presided over by a stipendiary

magistrate assisted by honorary magistrates for the trial of motor and other petty cases; a special police staff was also attached to the court. Also the detective staff, the river police, the traffic police, the staff of the public vehicles department and the mounted police all had to be increased on account of the growing complexities of city life. A special police staff had to be deputed to deal with an increase of hooliganism; for the high prices of 1919 and the influx of the old criminals released from jail consequent on the conclusion of the war had resulted in an increase of crime and had encouraged unruly elements or *goondas* of the city to renew their methods of terrorism. For financial reasons little was done during the period under review towards solving the problem of the accommodation much required by the police in Calcutta. Though in 1917 a sum of less than three lakhs of rupees was paid as yearly rent to private owners of the houses occupied by the police, it now exceeds four lakhs. This is an undesirable and uneconomical system and, as a solution, a house-building scheme to be financed by a loan is under the consideration of Government. Meanwhile, the new police office at Lall Bazar was completed in 1919.

The Calcutta and Suburban Police (Amendment) Act, 1919 (B. G. VII of 1919).—This Act amends the Calcutta Police Act, 1866, and the Calcutta Suburban Police Act, 1866, on the lines of section 8 of the Police Act, 1861, and provides that a police-officer under suspension shall continue subject to the same responsibilities, discipline and penalties, and to the same authorities as if he had not been suspended. It was passed in 1919 after a practical illustration of its necessity had occurred.

Jail accommodation.—Lord Ronaldshay in the course of his tours inspected all the jails at the stations visited by him. The question of the prevalent overcrowding of the prisons, the most difficult problem to be faced in the administration of jails in Bengal, engaged his attention. But financial considerations and latterly the necessity of awaiting the recommendations of the Indian Jail Commission put any adequate solution of the problem out of the question for the time being, though certain improvements were effected both in this respect and in the direction of more adequate hospital accommodation. For instance, special tuberculosis wards were constructed in the Suri and Comilla jails, where the prisoners of West and East Bengal, respectively, suffering from tuberculosis are segregated and the spread of the infection prevented. It is, however, gratifying to note that the health of a Bengal prisoner is unusually good; during the period the annual death-rate was, on one occasion, as low as 15·8

per mille, whereas a quarter of a century ago it went as high as 43. Sir Walter Buchanan, who completed during the period a term of seventeen years as Inspector-General of Prisons was largely responsible for this improvement. In 1921 jails became a reserved subject under Sir Abd-ur-rahim.

The conclusions of the Indian Jails Committee, of which Sir Walter Buchanan was a member appointed by the Government of India, which were considered in 1921, have made it clear that the problem of overcrowding is not likely to be solved without much expenditure. In particular the decision to abandon Port Blair in the Andamans as a penal settlement will render the erection of a new central jail necessary at a considerable cost. Arrangements were however made for the re-transfer from the Andamans of all political prisoners, female convicts and other persons whose re-transfer to India was considered necessary on medical grounds. At the end of 1921 the influx of a large number of middle-class prisoners, due to the non-co-operation movement, raised the problem of the treatment of prisoners possessing better education and social position than the ordinary convict. The problem was met temporarily by the issue of rules creating a special class for such prisoners.

Recommendations of the Indian Jails Committee.—Many improvements recommended by the Indian Jails Committee have had to be kept in abeyance for financial reasons, but minor improvements which could be effected without much additional expenditure have been given effect as far as practicable. To meet the religious demands of Muhammadan convicts they have been provided with long trousers instead of shorts. In a large number of jails honorary Moslem preachers have been appointed for giving moral and religious instruction to the Muhammadan prisoners on Fridays. The burial of dead Muhammadan prisoners, according to Muhammadan customs, at the expense of Government has been sanctioned. Sikh prisoners have been allowed to retain certain of their religious symbols, and facilities for the religious observances of prisoners of the various castes are allowed in all jails. Female non-official visitors have been appointed in a few jails.

The Bengal Children Act, 1922.—The law governing the punishment and protection of children has for some time past been felt to be defective and not in accordance with modern ideas on the subject; in particular, it afforded no means of protecting and rescuing children who are potential criminals but have not actually committed any crime. The Bengal Children Bill was therefore prepared in order to provide

for the custody, trial and punishment of youthful offenders and also for the protection of children and young persons. It follows the general lines of the English Children Act of 1908. It lays down that no child under the age of fourteen years shall under any circumstances be sentenced to death, transportation, or imprisonment for any offence, and it seeks to substitute educational treatment for penal measures in the case of older children convicted of an offence. The Bill was introduced in Council in 1921, taken through the Select Committee and passed into law in 1922.

Juvenile Jail.—Meanwhile a substantial advance was made in the development of the Juvenile Jail as an institution for the reformation of youthful criminals. Reading, writing, arithmetic and freehand drawing are taught at the school by a competent staff. Moral and religious instruction is given daily. The physical training which the boys receive helps to instil discipline and improve their physique besides making them cheerful and smart.

The manufacture of quinine tablets and treatments, however, continues to be the most important industry at this jail. It also acts as a distributor of cinchona products.

The Calcutta Fire Brigade.—During the previous administration the Fire Brigade had been brought to a high state of efficiency which it still maintains. It protects over 113 square miles with a population of 1½ millions. In 1921 a Committee was appointed by Government to consider the question of arrangements for fire control in the Calcutta Port area and the docks and also to advise what amendments should be made in the Licensed Warehouse and Fire Brigade Act, 1893. The report was under consideration at the end of the period. A large new fire station was completed in Central Avenue in 1921. The brigade is not under the Member in charge of police, but under the Ministry of Local Self-Government and Public Health.

CHAPTER IV.

Revenue History.

Revenue Administration.—It is not necessary to burden this report with matters regarding the ordinary routine or technical details of the land revenue management of the province though they give rise to a great deal of work. In fact there would be little of importance to say, whilst it is surprising how little the statistics of the ordinary branches of revenue and their administration in comparison with those of other departments were affected by the political, industrial and economic factors of the period, a fact which testifies to the soundness of the principles on which the revenue system of the province has been built. Attention must, however, be drawn to the economic condition of the people, famines and floods, agrarian measures, forests and a few other matters of importance which in Bengal are usually associated with its revenue history and administration.

Economic condition of the people—High prices.—Owing to the war, the prices of imported articles such as salt, sugar, kerosine oil and particularly of cloth were high and affected all classes of people throughout the period. At the commencement, however, the prices of foodstuffs were low and stocks were large owing to good harvests. The rice harvest, the staple crop of Bengal, of the year 1917-18 was specially good and the consequent low prices and large stocks in their turn formed a ground of complaint as they materially affected the pocket of the cultivator who was unable to get rid of his stocks. But, about the time of the Armistice in 1918, the situation regarding foodstuffs completely changed owing to three factors. In the first place, the rise of prices in Europe, a rise which had resulted from the reduction in the production of the necessaries of life in the combatant countries and from an inflation of paper currency, began at that time to have a sympathetic effect upon all prices in India; in the second place, the general failure of the monsoon throughout India in 1918 led to famine in other provinces; and, in the third place, the particular failure of the monsoon in Bengal led to a short crop of rice in the province. Two distinct causes were therefore at work, the war and the very short rice crop of the season 1918-19. In consequence, the prices of rice and other foodstuffs rose rapidly until in the month of August 1919 a panic in the price of

rice started in Eastern Bengal and thence spread all over the province. The panic was primarily due to a mistaken belief that there was an actual and general deficiency of rice. Fortunately, the provincial rice harvest of 1919-20 was moderately good, that of 1920-21 distinctly satisfactory, whilst that of 1921-22 was a fine crop surpassing in quantity the bumper crop of the season 1917-18. The result was that the price of rice, though still above the pre-war level, has been since 1919 on the downward grade and there has been no recurrence of the extraordinary prices of August 1919; in 1922 there was a marked fall. Pulses have also fallen in price. In fact the effect of the bad monsoon of 1918 has now been dissipated and the present comparatively high price of rice is entirely due to the general depreciation in the value of money. These high prices had a material effect on the people, particularly on middle-class persons on fixed incomes and on labour. On the other hand, the cultivator benefited from the high prices of his produce, for it is notorious that he cultivates a large surplus of rice for the non-cultivating classes. In 1919 the question formed a matter of engrossing interest as it intimately affected the pockets of the educated classes. Wild rumours were afloat regarding the cause and wild suggestions made for its remedy, endorsed by people who should have known better. The Indian press were unanimous in their efforts to find Government responsible, whilst many highly coloured accounts of deaths from starvation were published which on investigation proved to be unfounded. Since 1919, however, there has been a gradual readjustment of wages to prices and the changed conditions; and by 1921 the question had ceased to attract so much attention; people were becoming more accustomed to the general depreciation of the value of money.

Government were, however, by no means inactive in the matter, whilst Lord Ronaldshay himself took a personal interest in the course of prices and energetically strove to promote efforts for the alleviation of the situation. In 1918 the Government of India took steps to restrict the export of rice and other foodstuffs to other countries with Indian populations dependent upon India for supplies, to facilitate the import of cheaper Burma rice and to control inter-provincial movements; and the Director of Civil Supplies who had been originally appointed in connection with the requirements of foodstuff by the Allies was retained to deal with the matter in Bengal. At the beginning of the year 1919 the famine conditions prevalent in other provinces rendered it necessary for Bengal to send considerable supplies of rice to them, but prices rose so rapidly that in May the Government of Bengal was forced to ask the

Government of India to close down supplies to other provinces to a minimum and to allow Bengal an allotment of Burma rice. This was done, and district boards and municipalities were advised to purchase Burma rice and to open cheap grain shops for its distribution to the poorer classes where such rice could be sold more cheaply than ordinary common rice. The provision for the import of Burma rice was largely responsible for allaying the panic in August and September 1919. Early in 1920 the restriction on inter-provincial movements of rice were removed without any untoward effects; and later it was found unnecessary to make special arrangements for the import in the year 1921 of Burma rice, which is an unpopular article of diet unless it is much cheaper than Bengal rice. The office of the Director of Civil Supplies was accordingly closed at the end of 1920. The restrictions on exports of rice out of India still, however, remained in force until immediately after the close of the period under review. In respect of cloth, some attempt was made by Government to introduce standard cloth, but it was not popular. Government also attempted by means of communiqués, pamphlets and the formation of district prices committees to combat the suggestions that the high price of rice was due to exports from India or to an actual shortage of rice, suggestions which in themselves were calculated to make the price of rice jumpy. That these efforts were successful is problematical as the unofficial committee on high prices, which was appointed as a result of a resolution passed in the Legislative Council in the latter half of 1920, came to findings which literally ignored both the commonplace that high prices were due to the war and the fact of the restricted export from India. The committee roundly stated that it was evident that the rise in the price of rice in Bengal was mainly due to the exports overseas from India—on which the press had been most insistent—a sweeping and inaccurate statement which is sufficiently refuted by the actual statistics for production and export. In the last year or so of the period owing to a fall in the price of, and a very large diminution of the area under jute, a large proportion of the cultivators in Eastern Bengal were severely affected. The condition of labour is dealt with in chapter VI.

Floods.—There was a comparatively small flood of the Ajay and Damodar rivers in the year 1917 in the Burdwan division which caused some damage to crops and some distress, for the relief of which measures were undertaken. In 1918 such a flood as had not occurred for over a century traversed the districts of Rajshahi, Dinajpur, Bogra and Pabna, causing much damage to crops, homesteads and

cattle over an area of about 1,300 square miles, particularly in the districts of Rajshahi and Bogra. Relief was, however, promptly rendered; and a novel method of relief was introduced of the distribution of seeds by way of loan. Nearly four lakhs of rupees were distributed in agricultural loans. In 1920 excessive rains caused the Sabarnarekha and Cossye rivers in Midnapore to overflow and breach their banks with disastrous results, particularly in the case of the Cossye river, to the neighbouring lands. Not only were the crops destroyed but many persons were rendered homeless. Relief measures were promptly inaugurated and Lord Ronaldshay issued an appeal to the charitable public for funds, mainly for the reconstruction of the houses of those who had been rendered homeless, to which there was an immediate response. His Excellency also visited parts of the affected area, saw for himself the damage which had been done and inspected the arrangements for relief.

Cyclone of 1919.—The notable disturbance of the period was the cyclone of the 24th and 25th September 1919. It developed in the Bay of Bengal and struck the coast of the Sundarbans about 9 o'clock in the morning of the 24th September 1919. It swept in a direct line across the Khulna district, the north-western portion of Bakarganj, the Narail subdivision of Jessore and the greater part of the Faridpur and Dacca districts. Then with diminishing force, it passed over the western part of Tippera and the eastern portion of Mymensingh and ultimately dissipated itself in the Khasia Hills in Assam. The cyclone can be pictured as an intensely violent whirl-wind of about 25 miles in diameter moving across the map of Bengal at a rate of about 12 miles an hour. It was remarkable for its small dimensions and its great intensity. The damage caused by it was probably greater than any storm in Bengal for the last 200 years, and it is impossible to give an estimate of the enormous amount of damage done to buildings, craft, trees, communications and movables. The estimate of persons killed amounted to over 3,000 and of cattle to nearly 40,000. All telegraphic, postal, river, rail and road communications were disorganised. Singularly enough, the damage done to the crops in some places was counterbalanced by the benefits experienced elsewhere. Relief measures were immediately instituted. Government gave the different Collectors *carte blanche* to do what was necessary, and appointed Mr. S. G. Hart, I.C.S., as Cyclone Commissioner to organize the relief operations of the affected area. One of the principal features of the relief was the importation and provision of cheap Burma rice both for gratuitous relief and for sale as a means of steadying

the extraordinarily sensitive local markets, already upset by the panic in the price of rice. Over one and-a-half lakhs of maunds of rice were dealt with in this way. Cloth was similarly treated to the value of two lakhs of rupees; the major portion was distributed gratis. Another feature of the operations was the provision of special relief for middle-class people, as the area devastated by the cyclone contained the homes of a very large number of highly respectable families. The problem was how to provide middle-class sufferers with such relief as would not destroy their self-respect. This was solved by granting them loans without security and without interest; and it was left to their honour to repay. Charitable funds were distributed in this manner to the extent of about a lakh of rupees. Lord Ronaldshay made an appeal to the charitable public for funds to which there was a more than adequate response. Over four and-a-half lakhs were spent from the fund thus constituted, the Cyclone Central Relief Fund. In agricultural and seed loans over 13 lakhs of rupees were distributed. It is interesting to note that the action taken by Government during the cyclone did a great deal to restore the prestige of Government in the eyes of those of the educated classes who rely for their information regarding the activities of Government on that portion of the press which persistently misrepresents and vilifies those activities.

Bankura famine.—There was considerable distress in the Brahmanbaria subdivision of Tippera and a famine in the district of Bankura, both in the year 1919 after the poor harvest of the winter of 1918-19. The situation in Bankura was due to a failure of the rice crop mainly on the uplands and was aggravated by an epidemic of influenza at the end of 1918 and by the high prices of the necessities of life. It was these two factors which made the distress as keenly felt as in 1916, otherwise the famine in point of duration, extent or numbers did not compare in magnitude with that of 1916. No deaths occurred from starvation. Almost the whole district was affected with famine in varying degrees; relief operations lasted for 8½ months against 15 months in 1915-16 and the largest aggregate on any one day on relief of all kinds was 27,937 against 48,562 in 1915-16 when the whole district was affected. Nearly four and-a-half lakhs was spent on relief-proper and over five and-a-half lakhs on loans under the Agriculturists' Loans Act. Various measures were adopted, or are under consideration, for making the district of Bankura famine-proof, such as the extension of co-operative credit, industrial and irrigation societies (the Bankura Industrial Co-operative Union, Limited, solved the problem of the relief of weavers during the famine); the problem of evolving

a drought-resisting variety of autumn rice capable of germinating in a year of comparatively small rainfall, and, finally, the establishment of an agricultural farm in the district for the undertaking of experiments in the agricultural problems peculiar to the district.

Brahmanbaria distress.—The distress in the subdivision of Brahmanbaria was largely due to high floods in 1918, which had a detrimental effect on the crops followed by a drought from October 1918 to the end of June 1919. Two and-a-half lakhs were distributed by way of agricultural loans, a lakh was spent on gratuitous relief and over three-fourths of a lakh on test works, but the extent of the distress was probably not half of that which occurred in the years 1915 and 1916.

Relief operations—General.—Smaller areas were affected by local distress which was generally met by the distribution of agricultural loans. An inundation of salt water owing to a damaged embankment destroyed the crop of over 50 square miles in the district of Khulna, and the distress in the locality became so acute as to necessitate the distribution of gratuitous relief in 1921. One of the features of the relief operations during the period was the formation of private relief associations which adopted measures for relief independently of those organized by Government. It is satisfactory to note, however, that the efforts of the local officers to obtain co-ordination and to prevent over-lapping with official agency so as to secure to the sufferers the utmost benefit from the practical sympathy and generous donations of the public were, particularly in the case of the cyclone relief operations, successful to a considerable extent. Lord Ronaldshay took a personal interest in all the measures adopted for the relief of the distressed; but a record of such measures would not be complete without mention of the name of Sir John Cumming, to whose untiring energy and sympathy their success was largely due.

Some damage was done by the earthquake of the 8th July 1918 in the districts of Mymensingh and Tippera where it was more acutely felt than elsewhere.

The Bengal Tenancy (Amendment) Act, 1918 (B.C. II of 1918)—Transfers of land by aboriginal tenants.—Five agrarian measures were passed into law during the administration of Lord Ronaldshay, four of which arose out of recommendations of the Settlement Department. The first was a piece of patriarchal legislation designed to protect the unsophisticated and thriftless cultivators of certain tribes against themselves. Some years ago certain enquiries were made which left no doubt that the Sonthals in Western Bengal

and possibly other aboriginal tribes were being dispossessed of their lands owing to their ignorance and thriftlessness. A Bill was accordingly drafted in the time of Lord Carmichael with the object of placing restrictions on their lands passing into the hands of persons not belonging to aboriginal tribes, and was passed into law in the time of Lord Ronaldshay under the title of the Bengal Tenancy (Amendment) Act, 1918 (B.C. II of 1918). The Act applied in the first instance to the Sonthals of Birbhum, Bankura and Midnapore, and has been extended by notification to the Bhumijs of Bankura, the Maghs in part of the Bakarganj-Sundarbans, the Oraons and Sonthals of Rangpur and the Mundas, Oraons and Sonthals of Dinajpur. From the first reports received by Government it would have appeared that this measure had had little effect, whilst there was a tendency to stereotype an impression that it has been passed too late to be of much practical effect. Further detailed investigation has, however, disclosed the facts that the Act is very beneficial, that it does prevent the Sonthals from selling or mortgaging their lands, that it makes them control their expenditure and work harder, and that it is highly appreciated by the more intelligent Sonthals and by their neighbours who are anxious to have its provisions extended to them.

Bengal Tenancy (Amendment) Act, 1919 (B. C. III of 1919).—Another small amendment of the Bengal Tenancy Act was effected in 1919 by the enactment of an Act which provided that all impositions upon tenants, of road and public works cesses, in excess of the limits prescribed by clause (2) of section 41 of the Cess Act, 1880, or on any scale in excess of that prescribed by clause (3) of that section, should be illegal.

The Bengal Alluvial Lands Act, 1920 (B. C. V of 1920).—Another problem which had engaged the attention of Government for some time was solved in the period. This relates to the prevention of riots in connection with lands gained by alluvion. It was realized that the problem was peculiar to Bengal, but it had been left over until the *char* lands of the province had been surveyed. The attention of Government was, however, again drawn to the matter by the final reports on the survey and settlement operations in the districts of Faridpur and Dacca. These reports contain a description of the lawlessness which prevailed on account of the impossibility of exact knowledge of title when a *char* appeared in the Ganges, of the ease with which valuable crops can be grown on the *chars*, and of the advantage which is gained by the strong man who can enforce initial possession. In this state of the law there was a premium on violence; and serious riots involving loss of life were of frequent occurrence. The

Bengal Alluvial Lands Act, 1920 (B. C. V of 1920), was accordingly passed into law with the main object of giving opportunities for immediate action, when alluvial land forms, to prevent violence from gaining an undue advantage.

The Bengal Agricultural and Sanitary Improvement Act, 1920 (B. C. VI of 1920).—The most important agrarian measure, if considering its ultimate form it can be properly called agrarian, was the enactment of the Agricultural and Sanitary Improvement Bill. Lord Ronaldshay attached the utmost importance to this Act in the hope that it would facilitate the construction of drainage, anti-malarial and other works for the improvement of agricultural and sanitary conditions, and obviate the exasperating delays of the previous law incurred in their execution. Initially it was intended to deal with the practical difficulties involved in the execution of small works of agricultural improvement which had for their object either the drainage of uncultivated swamps or the storage of water for irrigation purposes, but in the end the whole question of agricultural and sanitary improvement was attacked. Public opinion confirmed the knowledge that there was a considerable demand for the execution of drainage projects for sanitary as well as agricultural purposes and revealed a consensus of opinion that there was a need for an alteration in the law. A committee was accordingly appointed to advise Government on the legislation which would be desirable to promote all types of drainage projects, and a Bill was evolved which after some amendment became law. It consolidates and amends the law relating to the construction of drainage and other works for the improvement of the agricultural and sanitary conditions of Bengal, which was contained in various Acts, in particular the Bengal Drainage Act and the Bengal Sanitary Drainage Act. The previous law was defective, in that in the case of small schemes it was not simple, suitable or effective, and in the case of large schemes it was rigid, cumbrous and dilatory. Neither of these Acts, for instance, contained provisions for the execution of works initiated by private individuals or bodies of agriculturists registered under the Co-operative Societies Act. The main fault of the previous law was its lack of elasticity, and the legislation was accordingly undertaken with a view to provide by legislation only for the essentials of procedure, details being relegated to statutory rules which could be altered in accordance with changes in conditions or experience.

The Bengal Land Registration (Amendment) Act, 1921 (B. C. II of 1921).—This small measure was passed in 1921 to amend the Land Registration Act with the object of making the separate account

work of the collectorate self-supporting by means of the levy of an additional fee on applicants for the opening of separate accounts for shares or parts of estates held by them under Government. The previous fee did not cover the cost of the administration of the work, which was therefore borne by the general public and not by the applicant.

The Bengal Tenancy Act Committee.—In accordance with a resolution carried in the Legislative Council on the 7th July 1921, a committee consisting of officials and non-officials was appointed by Government under the chairmanship of Mr. J. H. Kerr to consider and report what amendments are needed in the Bengal Tenancy Act. The law required revision amongst other matters in respect of the divergent sections applicable respectively to West and East Bengal; the question of the transferability of occupancy-holdings had been long on the tapis; the law regarding this was not wholly satisfactory; and the revenue authorities considered the law regarding status required amendment. The committee had not finished its labours at the end of the period.

Survey and settlement.—The preparation of a survey and record-of-rights under chapter X of the Bengal Tenancy Act for the benefit of the landlords and tenants as well as of the general administration, which had been inaugurated in Bakarganj in the year 1899, was continued during the period. The sanctioned programme was at first curtailed owing to the war, then resumed, but was finally halved owing to the present financial stringency of the province. A record-of-rights has now been prepared for the whole of the Dacca and Chittagong Divisions, for the districts of Rajshahi and Jalpaiguri in the Rajshahi Division, and for the district of Midnapore in the Burdwan Division. The records for the districts of Mymensingh, Dacca, Rajshahi, Midnapore, Tippera and Noakhali were completed during the period. They are in course of preparation in the districts of Bankura, Burdwan (the Asansol Subdivision), Birbhum, Jessore, Khulna, Nadia, Pabna and Bogra. At the beginning of the period under review, the records had been prepared for 19,468 square miles; by September 1921 this figure had risen to 36,178, representing more than half the area of the province to which the Bengal Tenancy Act applies. The most difficult problem encountered was that of the treatment of *utbundi* lands which are so prevalent in the district of Nadia. It is an interesting fact that the Nawab of Murshidabad was allowed the privilege of the summary process of the certificate procedure for the collection of his rents on the introduction of a procedure for the maintenance of his copy of the record-of-rights under the control of Government. He was the first landlord to be given this privilege.

Waste lands.—The rules for the grant of waste land leases to large capitalists remained in abeyance in the Sundarbans in the districts of 24-Parganas and Khulna pending an examination of the whole question. The capitalist system was condemned on three grounds, it caused a heavy loss of revenue, it afforded no adequate control over the landlord; and it encouraged the custom of subinfeudation by which middlemen were introduced between the grantee and the cultivator. It was eventually decided that the raiyatwari system of settlement should be adopted except where, owing to the inaccessibility or isolation of the block or the difficulty of securing cultivators, there was no hope of effecting a raiyatwari settlement for a considerable time.

Development of Kalimpong.—Prior to 1913 the policy of Government in regard to Kalimpong in the district of Darjeeling was to exclude Europeans and other foreigners from that tract of country, which was reserved for hillmen and specially Lepchas. In view of the application for a building site by an European in the year 1913 the question of modifying this policy was raised; and, finally, in 1919 owing to the congested state of Darjeeling and Kurseong, it was decided to develop Kalimpong as a hill station by throwing open a certain site occupying over three square miles on the ridge for building settlements; and a fully-considered project was prepared by Sir Charles Stevenson-Moore, then the Member of the Board of Revenue. A water-supply scheme was drawn up, sanctioned and was completed at the end of the period and various roads were completed or almost completed. By the end of the period a few houses had been constructed by private parties in anticipation of the completion of the scheme for the water-supply.

Forests.—The history of forest administration during the time of Lord Ronaldshay reflects the remarkable industrial development of the province. During the first 18 months the demands of the Munitions Board for timber were extensive and led to a considerable increase of revenue. Meanwhile, officers were placed on special duty to enquire into the industrial possibilities of the forests. Also one forest was leased out for the extraction of trees for the manufacture of tea-chests and another for the extraction of bamboo for the manufacture of paper-pulp, both new undertakings in Bengal. Further, owing to the same industrial development which called for fresh efforts from the department, its gross revenue rose from Rs. 15 lakhs in 1917-18 to over Rs. 21½ lakhs in 1920-21. On account, however, of the exigencies of the war, expenditure had been retarded on communications, buildings, tools and plant and live-stock until the year 1920-21 when the department began to put matters right

again by incurring a considerable expenditure on these items. The result was therefore an immediate fall in net revenue below the pre-war figure of 9½ lakhs by over a lakh of rupees. When this leeway has been made good, an appreciable increase of net revenue is expected; for in its forests Bengal possesses resources which can be considerably developed by the application of adequate capital and staff. The Indian Forest Service in Bengal is not large; and it was severely handicapped by the resignation of two of its officers who left the service to obtain more remunerative employment. In 1920 the Chittagong and the Chittagong Hill Tracts divisions were converted into three divisions.

Cinchona.—The history of quinine in general, and of the Government cinchona plantations in Bengal in particular, is intimately connected with the war. Quinine is a commodity controlled by a few Dutch monopolists; indeed, the amount of cinchona grown in India or by British firms in Java is trivial compared with that produced by the Dutch. During the war, however, the Dutch on the one hand had to have certain commodities from the Allies, which the latter could ill-afford; the Allies on the other hand had to have quinine for their soldiers. An agreement was accordingly signed to be worked by the Dutch combine and a body called the Association of Quinine Manufacturers in Allied countries, by which supplies were assured and the price controlled in the English market. Owing to the demand, prices in India naturally rose and after decontrol, when the market came again under the control of the Dutch, prices rose still further. During the war the cinchona plantations and the factory in Bengal were doing their best to supply the Allies both with quinine and cinchona febrifuge. No less than 42 per cent. of the total quantity of quinine produced since 1887 and no less than 46 per cent. of the total quantity of cinchona febrifuge produced since 1901 was issued during the war mainly for the use of the Allies. Not only was the provincial reserve of quinine materially reduced thereby but this proved such a strain on the plantations that recourse had to be had to the otherwise undesirable expedient of increasing the immediate harvest by cutting out immature cinchona trees. This temporary expedient was, however, stopped after the war and superseded by another means of obtaining a reasonable amount of bark without substantially prejudicing the total output. Meanwhile re-afforestation was going on, and the area under cinchona has increased from 2,405 acres in 1917 to 3,236 acres in 1921. The great rise in prices and the war demand naturally increased the receipts of the department very substantially; in the war year 1917-18 the abnormal surplus of 24 lakhs of rupees was obtained, whilst even in 1920-21 there was a respectable surplus of over seven and-a-half lakhs.

CHAPTER V.

Finance.

Financial position.—During the war the expenditure on the administration of the province was curtailed to a minimum, and provision was only made for new schemes which were of an imperative and immediate necessity. This policy was abandoned in 1919, but it was not till the year 1921 that the finances of the province felt the full force of the leeway, which had been lost during the war and which had to be made up, of the cost of the growing needs of the province and of the depreciation in the value of money caused by the war. Whereas the expenditure in the war year of 1917-18 had been only 6½ crores, in 1921-22 it was originally estimated at a little over 11 crores exclusive of the contribution of 63 lakhs to the central Government. The large increase was mainly due to the revision of pay of all imperial, provincial and subordinate services, to rise in prices and wages of labour and generally to the increase of work in the administration of the province including that caused by the introduction of the reforms.

Till 1920 the revenue of the province kept pace with the increase in expenditure. The most marked increase occurred under the head of income-tax, but stamps and excise also showed a satisfactory increase. In the year 1920-21, however, the revenue was in defect of expenditure to the extent of over half a crore, and in 1921-22, the year of the introduction of the new system of finance under the reform scheme to the enormous extent of 2½ crores (according to the sanctioned budget). That something of the kind would happen, owing to the considerations already mentioned, had been anticipated by the Government of Bengal when the new system was under discussion. Moreover, the position of the province of Bengal was peculiar, in that its largest source of revenue, viz., land revenue, was, owing to the Permanent Settlement of Bengal, practically stationary. The situation therefore gave rise to the gravest anxiety, in which Lord Ronaldshay shared; and throughout the discussions regarding the new financial settlement the Government of Bengal protested strongly against these considerations being ignored. The discussions started in 1919 when an attempt was made to arrive at a normal scale of revenue and expenditure for all provinces on the basis of the Montagu-Chelmsford report which had for its objective the allocation to the different provinces of

the sources of revenue, so far as practicable, of the subjects they administered (*vide* chapter I).¹ The Government of India, however, adopted a normal estimate of expenditure for Bengal more than half a crore below that estimated by the Government of Bengal. Accordingly, early in 1920 a protest was made to the committee on financial relations which was appointed under the presidency of Lord Meston to consider the whole question of imperial and provincial finance. This committee visited Calcutta and discussed the position, and eventually recommended that the revenue from general stamps should be provincialised. In return for this additional income the initial contribution of this presidency to the Government of India was fixed at Rs. 63 lakhs a year, but it was provided that the percentage of the total contribution for all provinces which Bengal should be required to pay in the future should be gradually raised to 19 per cent., the highest of all the contributing provinces. This left Bengal with a nominal working surplus, but it had no regard to the many important and imperative claims on its resources or to the later unexpected transfer to Bengal of the financial responsibility for such important and expensive institutions as the universities of Dacca and Calcutta. Another protest was made; and the joint select committee of the two houses of Parliament, who examined and decided on the report of the Meston Committee, made a further concession to all provinces of some share in the growth of revenue from taxation on incomes and provided that the initial contribution payable by all provinces to the Government of India should, in no case, be increased but be gradually reduced. But, as neither of these concessions were likely to afford any immediate prospect of relief to the province, the committee commended the peculiar financial difficulties of Bengal to the special consideration of the Government of India. Then came the budget of the year 1921-22 which amply fulfilled the forebodings of the Government of Bengal and showed the aforesaid deficit of 2½ crores. This gave rise to alarm as it put the success of the reforms scheme in jeopardy. Another determined effort was therefore made to get the authorities to realise the extreme gravity of the situation; and, finally, towards the middle of the year 1921 a deputation from the Bengal Government including Mr. J. H. Kerr, the Finance Member, and two ministers and two non-official members of the Legislative Council, waited on the Viceroy at Simla. As a result of this interview the Government of India agreed to waive their claim for the contribution of 63 lakhs from Bengal for a period of three years, with effect from the year 1922-23. At the same time the possibility of retrenchment was considered;

¹ For details, *vide* the Revolution Rules framed under the Government of India Act, 1919.

the requirements of every department were rigidly scrutinised and all expenditure that could possibly be avoided without causing serious administrative inconvenience was retrenched. The chief schemes which have thus been held in abeyance are the long pending projects for the partition of the Midnapore¹ and Mymensingh districts (though the postponement in the latter case was also due to an adverse vote in Council on the grant for the scheme which was accepted by His Excellency) and for the Grand Trunk Canal. The programme for the preparation of a survey and record-of-rights for the province has also been halved. As even these measures left a considerable deficit, all sources for augmenting revenue were explored. Finally, measures were passed in the Legislative Council in 1922 for levying a tax on amusements by the Bengal Amusements Tax Act, 1922 (B. C. V of 1922) and for raising the duties under general and court-fees stamps by the Bengal Stamp (Amendment) Act, 1922 (B. C. III of 1922) and the Bengal Court-fees (Amendment) Act, 1922 (B. C. IV of 1922). Lord Ronaldshay had, however, pointed out, when he addressed the Council on the general question in November 1921, that Government had never departed from the view that the financial settlement ought to have been such as to permit the continuance of the administration on existing lines without the imposition of additional taxation. As a result of the unfavourable treatment of the province the provincial balance which stood at the beginning of the period at 3½ crores amounted, it is estimated, to little more than half a crore on the 31st March 1922.

Income-tax.—The head of revenue which exhibited the greatest changes during the period was that of income-tax. It was affected by several changes in the law. There was first the Income-tax (Amendment) Act V of 1916, which introduced enhanced rates of taxation and a special system of refunds in respect of the tax levied at the source on interest on securities. This was followed by the Income-tax Act VII of 1918, which entirely repealed the principal Act of 1886 and practically recast it with a three-fold purpose. In the first place it remedied certain irregularities in the assessment of individual tax-payers; secondly, it defined more precisely the methods whereby income and profits of various descriptions were to be calculated; and, in the third place, it effected a number of improvements in the machinery of assessment. The most important changes it introduced were a system of making assessments at a rate determined by the total income of an assessee and a system of adjustment on the basis of the previous years' income. An amending Act IV of 1919

¹ A new subdivision was however opened at Jhargram in Midnapore on the 1st February 1922

raised the minimum limit of taxable income to Rs. 2,000 and a further amending Act XVII of 1920 fixed a fresh rate of assessment for companies and reduced the amount of tax payable by an assessee when the margin above a certain limit was small.

The result on the revenue was as follows :—

			Rs. (to nearest lakh).
1915-16	...	...	70
1916-17	..	...	1,68
1917-18	...	...	1,98
1918-19	...	...	2,13
1919-20	...	...	3,38
1920-21	...	...	4,28

These remarkable increases, though resulting in part from the changes described above, are a striking testimony of the prosperity of trade, particularly of the jute and coal industries, which is also illustrated by the figures given below for super-tax and excess profits duty. Before the recent financial settlement the province of Bengal and the Government of India used to share the revenue from income-tax equally; it is now a central receipt of the Government of India from which the province will only obtain any revenue in the event of the assessed income of the year 1920-21 being exceeded any year.

Super-tax.—In addition to income-tax, with effect from the 1st April 1917 super-tax was levied on all incomes and profits of half a lakh of rupees and over, a figure which was raised to three-fourths of a lakh by the amending Act XIX of 1920 in the case of a Hindu undivided family. The revenue derived from this Act was as follows :—

			Rs. (to nearest lakh).
1917-18	...	...	1,32
1918-19	...	...	1,27
1919-20	...	...	90
1920-21	...	...	3,41

The low figures in 1919-20 were due to the imposition of an excess profits tax under which it was optional for an assessee either to pay super-tax or excess profits duty. The province of Bengal did not, however, obtain any share of the super-tax.

Excess Profits Duty.—Under the Excess Profits Duty Act, which was passed in 1919, a duty on business profits above a certain standard was levied. In 1919 the duty collected was over 5 crores from

217 companies and firms. The operation of the Act ceased in 1920-21 with an assessment of 130 new companies and firms paying a duty of over 70 lakhs. The province did not, however, obtain any share of this duty.

Reorganization of Income-tax Department.—During the year 1921-22 measures were being taken which will introduce a new system of income-tax administration. The existing Acts were overhauled and a new Income-tax Act, which will effect considerable changes in the methods and scope of assessment, came before the Indian legislature. At the same time a complete reorganization of the machinery of assessment was devised, and in future the administration of income-tax will be divorced from the ordinary district administration. Previously the administration of the Act was entrusted to the Revenue authorities in charge of the districts and subdivisions, whereas in Calcutta a special whole-time staff was entertained under a whole-time Collector who worked under the control of the divisional Commissioner. It was found that the growing complexity of the general administration prevented local officers from giving to income-tax work the amount of attention that its importance demanded, while the increasingly technical and specialized nature of the subject brought into prominence the importance of employing in the administration of income-tax only officers of special training and experience. The department was accordingly reorganized as a self-contained department of whole-time officers under a Commissioner of Income-tax appointed with the sanction of the Secretary of State for India, with effect from the 25th February 1922. The Commissioner is assisted by a staff of superior officers who are mainly responsible for the assessment and collection of the tax in their respective charges.

Services and establishments.—It has been stated that the large increase of expenditure was partially due to the revision of the pay of all services. It is, therefore, convenient to deal with this revision in this chapter. On the cessation of hostilities steps were taken by the Government of India to examine, in conjunction with the local Governments, the recommendations of the Public Services Commission and to obtain the orders of the Secretary of State on their considered proposals regarding the reorganization of the services, the methods of recruitment and the revision of pay. In this respect the Government of Bengal, the services and the people were fortunate in that Lord Ronaldshay had been a member of that Commission and thoroughly understood the needs and difficulties of both Government and the services as well as the aspirations of the people regarding the further Indianization of the imperial services. Definite

steps were actually taken in the period towards such Indianization ; and though this is mainly the concern of the Government of India, initial selections of Indian candidates for the Indian Civil and Forest Services were made by the local Government whilst a district judge was selected from the Bar. Moreover, a competitive examination was held in Calcutta in December 1921 for the admission of Indians to the Indian (Imperial) Police Force. The pay of the imperial and provincial services was revised in the light of the recommendations of the Commission and of the rise in prices caused by the war ; and the services were reorganized. On the same grounds the pay of almost all the subordinate services and of all the menial establishments was raised during the period or immediately after its close. Two committees were also appointed, the one to advise regarding the organization and pay of the educational services subordinate to the Bengal Education Services and the other to deal with the pay of the general clerical and menial establishments of the province ; and their reports were duly considered by Government. The subordinate civil service was reorganized so as to afford a career in itself by means of a substantial improvement of pay. The total annual bill for the improvement of pay of all services and establishments substantially exceeded a crore ; that alone for the clerical and menial establishments was estimated at over 40 lakhs. Time-scales were universally adopted in the revision of pay. The process of revision, except in respect of the clerical and some other establishments, was almost complete by the end of the period.

CHAPTER VI.

Commerce, Industry and Labour.

Commerce and Industry.—Broadly speaking the period may be divided into three smaller periods—first, the war period when commerce overseas was restricted and local industries showed signs of revival; second, the period immediately after the war when commerce overseas rapidly expanded and the industrial awakening of Bengal became marked; and, third, the reactionary period starting in the year 1921 when there was a world-wide depression of trade. On the whole, except during the last year, the trade of the province was very prosperous. The development of industries including industrial research and technical education came under Nawab Syed Nawab Ali Chaudhuri, the Minister for Agriculture and Public Works, in 1921, but commerce, marine and certain industrial matters, such as factories, settlement of labour disputes, electricity, boilers, smoke-nuisances, the welfare of labour and emigration are reserved subjects, which are with the exception of emigration under Mr. J. H. Kerr. It is, however, convenient to deal with these items in the same chapter.

Trade.—The export and import trade of the province is mainly centred in the chief port of Calcutta, though Chittagong and its sub-ports are responsible for a small proportion, mainly of exports. Its most salient feature was the loss of the balance of trade hitherto in favour of India. The value of the exports ordinarily exceeds that of imports by roughly 50 per cent. In the year 1920, however, the surplus of exports from Calcutta was reduced to less than 3 per cent. of the imports into Calcutta and the year 1921 closed with an excess of imports over exports to the extent of 25 per cent. of the value of the imports. There were other remarkable fluctuations, as the following table of imports and exports of private merchandise for the port of Calcutta shows:—

			Imports.	Exports.
			Rs.	Rs.
1917	...	...	57	82
1918	...	...	60	105
1919	...	...	75	124
1920	...	...	115	118
1921	...	...	109	82

(To the nearest crore.)

Owing, however, to the rise in prices these figures are not a true gauge of the relative quantities of articles imported or exported; for instance, exports were in quantity considerably less in the year 1921 than in the year 1917, though the figure for value was practically the same in the two years. There was, nevertheless, an intermediate increase in exports which was most marked in the quantities of raw jute and hide and skins; shipments of raw jute increased on account of the reviving activities in European countries, whilst hides and skins went mainly to the United States. Coal also showed a large intermediate increase. This was followed by a remarkable decrease in the demand for goods from India broadly on account of the unsettled state of Europe and of its finances. All the principal exports of jute, linseed, hides and skins, lac and coal were depressed. Tea suffered badly in 1920, but revived in 1921. On the other hand, a feature of the export trade of 1921 was the revival of shipments to Germany chiefly of raw jute and cow hides. In the years 1920 and 1921 there was a very prominent increase in the quantity of imports of machinery, railway plant, rolling-stock, metals and motor-cars which India was unable to obtain during the war and which were also attracted by the industrial awakening of the province.

Port of Calcutta.—Less tonnage entered the port of Calcutta in the year 1917-18 than in any other year of the war. The net tonnage then nearly touched the low figures of two million tons; but in 1920-21 the figure of four millions was exceeded as more ships were by then available for trade in the East. The gross tonnage of vessels entering the port in that year was over six and-a-half million tons. In the financial year 1920-21 the income of the Calcutta Port Trust was the largest on record, but after April 1921 owing to the depression of trade, its operations were carried out at a loss and a higher scale of charges on account of river dues had to be enforced pending the exploration of additional source of revenue. The year 1921 was the 50th-year of the life of the Trust and it was marked by an important change in its administration in the appointment of a whole-time salaried Chairman, Mr. C. D. M. Hindley, in place of a part-time chairman who had hitherto been the chief Executive Officer of the Trust. The Calcutta Port (Amendment) Act, 1920 (B. C. VII of 1920), was passed so as to give effect to this change.

With the introduction of the reforms scheme the Port of Calcutta was declared to be a major port. Its administration has become a central subject and the local Government only exercise their functions as agents of the Government of India.

Pilots.—The recruitment of leadsmen apprentices for the Bengal Pilot service of Calcutta was seriously affected by the war, and although attempts were made to obtain recruits from England and from the merchant service in the East, these endeavours proved unsuccessful. As a temporary expedient, therefore, outside candidates from the mercantile marine were appointed to the posts of junior officers of the two pilot vessels so as to enable the leadsmen apprentices employed in these posts to be placed on the running list with a view to studying the conditions of the river Hooghly. Further, a bonus of 33 per cent. on their pay was granted to leadsmen apprentices, with effect from 1st April 1917, for the period of the war and six months thereafter. After the cessation of hostilities, however, the situation became easier and several leadsmen apprentices were recruited annually. In 1921, the rules for such recruitment were changed so as to give effect to the recommendation of the Public Services Commission that the entry of natives of India into the Pilot service should be facilitated. Another difficulty due to the war was the decrease in the earnings of pilots, who are remunerated by the payment of half the pilotage fees levied from masters of vessels navigating the river Hooghly, owing to the reduction of tonnage visiting the Port of Calcutta. The difficulty was met by a system of guaranteed minimum remuneration which came into force on the 1st April 1918.

By the Calcutta Pilots (Amendment) Act, 1920 (B. C. IV of 1920), the Calcutta Pilots Act, 1859, was so amended as to do away with the system of punishing pilots by means of the reduction of their earnings. This was another of the recommendations of the Public Services Commission.

It is an interesting fact that in 1918 restrictions on night navigation for both inward and outward bound ships on the Hooghly between Mool Point and Saugor were removed, and it is now left to the discretion of the pilot whether he should proceed or not with the vessel in his charge.

Howrah bridge.—In the previous administration the question of the construction of a new and up-to-date Howrah bridge connecting Howrah and Calcutta over the river Hooghly was under consideration. The present floating bridge with an opening span, which was designed by Sir Bradford Leslie, was opened on the 1st February 1875; it is old and the traffic requirements of the city have outgrown its capacity. Therefore in 1913 the Commissioners of the Port of Calcutta who are entrusted with the up-keep of the bridge, submitted a detailed

report to Government with the conditions and specifications for a new floating bridge. Government, however, determined, particularly as there was some conflict of professional opinion, to obtain the best possible engineering opinion as to the design. Mr. Basil Mott, who was nominated by the President of the Institute of Civil Engineers in London, was accordingly engaged to investigate the problem. He visited Calcutta in the cold weather of 1916-17; and his report was received in November 1918. Mr. Mott recorded his opinion, from an engineering point of view, that the bridge should be a fixed structure of the single span arched type. While Mr. Mott's report was under review, Sir Bradford Leslie undertook and submitted to Government complete drawings of a design for a twin floating bridge. In the discussions which followed there was a considerably divergence of opinion regarding the type of bridge to be adopted, and Government decided to elicit the views of the Bengal Chamber of Commerce and other public bodies. In their replies to this reference, a new point of great importance was raised, namely, the necessity for an opening span permitting the passage of sea-going vessels. As the difficulties of the problem would be greatly reduced if the opening span could be eliminated, in 1921 Government appointed a committee to advise on this point. They reported that an opening span was not necessary for the work of the port and that it would suffice to have a bridge with a fixed headway permitting the passage of inland craft. This advice was accepted by Government, who thereupon appointed an expert committee of engineers under the chairmanship of Sir Rajendra Nath Mookerjee, to advise on the problem of the type of bridge required. In their report, which was submitted in February 1922, they recommended the construction of a cantilever bridge at a cost of about two millions sterling.

Port of Chittagong.—For some time past the financial position of the port of Chittagong has been a source of anxiety owing to the regularity with which its expenditure has exceeded its receipts, the deficits being made good by Government grants. During the war work was dislocated and fewer vessels entered the port and therefore its revenues fell, but, though special measures were taken for improving the financial position of the port and the revenues subsequently revived with the revival of trade, its expenditure increased at a still greater rate on account of the high cost of materials and of the revision of the pay of the establishment. One of these special measures was the enactment of the Chittagong Port (Amendment) Act, 1918 (B. C. V of 1918), which removed the maximum limit imposed on river dues by the Chittagong Port Act, 1914. At

the same time the problem of the development of the port which had been under consideration in the previous administration was again examined by Sir George Buchanan under the orders of the Government of India. His recommendations for certain important engineering works in addition to the provision of one or two dredgers were accepted, but, in view of the financial condition of the port, only urgent work has been undertaken at the expense of the Governments of Bengal and India. The question was then raised of the transfer of the port to the Assam-Bengal Railway, as being in fact the terminal port of that railway, and was in 1919 decided in the affirmative, but owing to financial considerations the proposal was not given effect to during the period. In 1921 under the reforms scheme the whole of the responsibility for the administration and financial control of the port devolved on the local Government. The position was undergoing examination at the end of the period owing to the inability of the local Government to furnish funds for the development of the port.

The Industrial awakening of Bengal and development of the Department of Industries.—At the beginning of the period the war was in the third year of its progress. On the one hand, supplies from foreign markets were cut off, and on the other, restrictions were placed on the export and manufacture of articles from the United Kingdom leading to a great depletion of stocks of material and machinery in the markets. These two causes were mainly responsible for the remarkable industrial awakening of Bengal which occurred during the period. At the same time, however, the Government of India had been moving in the matter and had appointed the Indian Industrial Commission to examine the whole field of Indian industry and to advise on the methods of encouraging industrial development. Meanwhile, the Government of Bengal had not been inactive for they considered that the question was of paramount importance overshadowing the necessity for war economies. Accordingly, in the year 1917 a temporary Director of Industries was appointed to get into touch with local industries, study their problems and afford the advice and assistance which had hitherto been lacking. At that time he also held the somewhat similar post of Controller of Munitions under the Indian Munitions Board, a post which almost absorbed his whole time and which had been started with the object of providing munitions for the war and of developing Indian industries with special reference to the needs of the war. Finally, as a result of the recommendations of the Industrial Commission, the post of Director of Industries was made permanent on the 1st

January 1920, the separation of his work from that of the Controller of Munitions gradually effected and the staff of the department gradually organised. His duties are multifarious. On the "reserved" side come factory, boiler and electricity inspection, the prevention of smoke-nuisances (four technical departments which were transferred to the department of Industries), and the investigation of labour problems. On the "transferred" side, the two main subjects are the development of industries and technical and industrial education. The staff includes a Deputy Director, five Superintendents of Industries, one for each division, the Industrial Intelligence Officer, the Inspector of Technical and Industrial Institutions, the Superintendent of Textile Demonstrations and an industrial chemist; an industrial engineer is about to be appointed. It also includes the staff of the four technical departments mentioned above, which were transferred to the department of Industries. An Advisory Board of eleven members, mostly business men with wide experience of the industries of the province was also appointed to assist the Director.

Therefore more than the nucleus of a very complete organization for dealing with industries came into being in 1920 owing mainly to Sir Henry Wheeler who was then the Member for Commerce. From the very first Lord Ronaldshay realised that the solution of some at least of the economic and political problems of Bengal lay in industrial development and that it was necessary for Government to give as much assistance and encouragement as it was in their power to give. Probably his own most important contribution to the development was the energetic encouragement he gave to, and the real interest he took in, all technical and industrial activities and, in particular, in the foundation of a fully equipped technical school in Calcutta for giving adequate theoretical instruction to apprentices employed in the engineering workshops in or near Calcutta. A strong committee worked out a scheme for the school which is being carried into effect.

At the beginning of the period private enterprise had in the case of the larger industries already anticipated the assistance of Government. For instance, the large demands for leather for war purposes had caused the reorganization of existing tanneries and called new ones into being, whilst the jute industry had led the way in counteracting the restrictions on imports of metal and machinery by organizing in Bengal the manufacture of the subsidiary articles essential to the mills. Subsequently, however, the office of the Director of Industries was of much assistance to the movement in finding out the main requirements of different industries,

in ascertaining how they could be met locally and in the provision of facilities for their local manufacture or production. In this way the local manufacture of the principal requirements of the tea industry, viz., of tea boxes which were previously obtained from Japan, Russia and elsewhere, of pruning knives and machinery, was started.

Calcutta Research Tannery.—Further in order to keep in touch with the development of Calcutta as a large tanning centre, to assist it and to see that the efforts of private enterprise were not wasted for lack of information, a Government Research Tannery was established in Calcutta in May 1919. This made considerable progress in its work. It carried on investigations both into raw materials and into tanning methods with demonstrations of the latter, whilst its products are recognised to be of good quality and fetch satisfactory prices. Apprentices are trained at the tannery. As a result of this impetus, boot and shoe-making factories are now coming into existence.

Cottage Industries.—Amongst cottage industries hand-loom weaving, in which many improvements have been introduced by the department of Industries, began to find favour; and several engineering firms started the manufacture of looms and accessories. The assistance given by the department of Co-operative Societies in the development of cottage industries, in particular weaving, has been mentioned elsewhere.

Companies.—Recently, the most noticeable feature of the industrial development has been the promotion of new companies to work, for instance, rice mills, oil mills and lac factories in rural areas where the raw materials are available at a low price. Mention might also be made of the development of the iron and steel industry, but probably the best proof of the industrial awakening is, to be found in the large number of companies which came into existence in the years 1918-19 and subsequently. In the years 1916-17 and 1917-18, respectively, only 114 and 166 new companies were registered under the Indian Companies Act (VII of 1913), but in years 1918-19, 1919-20, 1920-21, the numbers rose to 204, 532 and 452, respectively, disclosing a state of unprecedented activity in the commercial life and enterprise of Bengal. This was in spite of the restriction placed on company promoting by the purely war measure of the Indian Companies Restriction Act (XII of 1918), which was in force from March 1918 to September 1919 and which made it necessary for a new company to obtain a license from the Governor-General in Council before registration. The paid-up capital of limited

liability companies had also increased from 37 crores in March 1917 to 73 crores in March 1921. Moreover, of the new companies registered in 1919-20 and 1920-21, 306 and 339, respectively, were under Indian management, a sufficient index of the impulse which had been given to local enterprise. Towards the end of the period, however, the numbers of registrations fell off to about 25 a month and the development of industries suffered a check. The balance of trade owing to troubles in Europe turned against India and the rate of exchange fell leading to a severe strain on the money market. At the same time labour unrest was prevalent, there were frequent dislocations of means of communications owing to strikes and there was a shortage of waggons. Nevertheless, the development did continue though in a less marked degree.

Factories.—The industrial development of the province is also exhibited by the numbers of factories under the operation of the Indian Factories Act, 1911 (XII of 1911), which increased from 492 at the close of the year 1916 to 720 at the close of the year 1921. During the war a good proportion escaped inspection because the inspecting staff were largely employed in advising Government on applications for priority certificates in respect of materials required from the United Kingdom, but urgent matters connected with the administration of the Act were properly attended to. Steady progress was also made in the betterment of the conditions of labour in the factories; in particular, many of the larger factories spent considerable sums of money out of their war profits in providing well-built houses for their operatives, in the construction of excellent bathing facilities in the shape of tanks and in the general improvement of sanitary conditions.

International Labour Conference.—The whole question of the conditions of labour in factories and elsewhere came under discussion in 1920 and 1921 as a result of the deliberations of the International Labour Conference which was held towards the end of the year 1919 at Washington and at which Sir A. R. Murray was a representative. To a large extent the Government of Bengal, acting on the advice of the commercial community, were in favour of the acceptance of the recommendations. A sixty-hour week in factories and a fifty-four-hour week in mines were approved, with the proviso that it should not affect the hours during which the machinery and plant is kept working under a system of shifts. The proposal to amend the definition of "factory" was so far accepted as to make it apply to places employing 20 or more labourers with an option to the local Government to apply it where 10 or more persons are employed, an option

of which the Government of Bengal intended to avail themselves. But it was not possible to accept all the recommendations regarding the employment of women and children owing to the peculiar conditions of the country. The prohibition of the employment of children under 14 was not approved, but the figure 12 was adopted in place of the present age of nine. As to the employment of women before and after child-birth, a lady doctor has recently been employed to study the conditions of such employment in Bengal. All this led to extensive changes in the Indian Factories Act, which was amended by the Government of India in January 1922; it will entail heavier work for the inspecting staff and an increase by more than cent. per cent. of factories on the registers of the Factory Inspecting Department.

The awakening of labour.—Along with the industrial awakening of Bengal there was also an awakening of labour; and the problem of the relations between capital and labour obtained for the first time considerable prominence in the province. Of the possible magnitude of this problem Lord Ronaldshay had no illusions, and he fostered the constructive efforts which were made both privately and by Government to solve it. There are four principal groups of labour in Bengal; the largest group is chiefly employed in the jute mills along the banks of the Hooghly in the neighbourhood of Calcutta; the next largest work in the coal-fields of the Bardwan, Bankura and Birbhum districts; the third group is composed of tea-garden labourers in Darjeeling and the Duars; and the fourth of employes on the railways and inland steamers. A large proportion of the labour is supplied by other provinces. Agricultural labour is ordinarily of no importance. At the commencement of the period the demand for labour was great on account of the prosperity of the classes of industries to which the first three groups belong. But in 1919, though the demand continued, the supply of labour became much greater owing to the scarcity and high prices prevailing in the districts from which the labour was recruited. Meanwhile, wages increased, but probably owing to the supply of labour being greater than the demand they did not rise sufficiently in proportion to the rise in prices with the result that the year 1920 saw an unusual number of strikes, almost all of which arose from demands for higher wages. None of the labour elements were at first organised into unions but they showed a remarkable power of concentrated action when their work brought them together and their interests were the same. The strikes began with isolated stoppages of work in the Calcutta area; and the success which attended these led others to follow their example. Most, however, of these strikes were short lived; for the

employers were not slow to recognise the justice of the men's position and the process of adjustment of wages to prices was generally amicable. The situation then began to develop. One development was a change in the causes of strikes and was marked by the introduction of the political element into the arena. Labour had awakened and the men had tasted power; they had found it so easy to obtain reasonable demands for an increase of wages by means of strikes that they began to strike on other and even trivial grounds and, incidentally, they became an easy prey to the political agitator. There were several purely political strikes, the most important of which have already been dealt with elsewhere. The two following cases are illustrative of the trivial grounds for striking. In the first case, a contributory cause to a strike in the coal districts was the appearance of a few elephants given out to be the vanguard of a Gandhi army on its way to Calcutta. In the second, the men struck because they had not been rewarded for not striking when urged to do so at the instance of a political agitator, and only resumed work on his promising to take up their case! In the last six months of 1920 the cause of the strikes had been a demand for an increase of higher wages in almost every one of the 106 strikes (involving 170,000 workers) recorded by the department of Industries. On the other hand, in 1921 only half out of 142 strikes (involving 211,800 work people) were due to disputes regarding emoluments, or leave or hours of work. In the second place, in proportion as the demands of the strikers became more unreasonable, so did their success diminish. In the last six months of 1920, only one-fifth of the men secured no advantage from their strikes, but in 1921 this number had increased to two-thirds. The third development was a movement in the direction of the formation of organised labour associations which Lord Ronaldshay recognised were to the advantage of both workers and employers. Many of these associations were bodies called into existence purely *ad hoc* to deal with particular problems. Once the immediate causes of their origin disappeared, they died a natural death. Such bodies had no definite constitution and no regular system of collecting dues from their members; in most cases, the financial help came from outside. Other associations or unions have continued a more or less precarious existence for some time; examples of these are the Central Uriya Labour Association and the Anjuman Khansamahs' Union. Still others show signs of permanence; these unions are almost all connected with public utility services, *e.g.*, the Seamen's Union, the Tramwaymen's Union, and the various branches of the Railway Indian Labour Association. Practically every one of

the unions has, from time to time, been weakened by internal dissensions, or "splits," which in some cases have led to rival organizations; and, in every case, the leaders have found difficulty in persuading the men to pay regular union dues. In many instances the leaders have had a more political than economic interest in organising the workers, and, in a few cases, the leaders have been accused of having only a personal interest. In some cases, however, the unions have really attempted to approach labour problems from a purely economic point of view; and not the least significant sign of such an attitude was the close study by one or two unions of recent developments in International Labour legislation, notably the conventions and recommendations passed at the Girona and Geneva conferences. But on the whole, few *bona-fide* labour leaders from outside the ranks of labour itself have so far appeared.

The awakening of labour has been almost necessarily accompanied by a fourth development, the beginnings of official machinery to deal with labour matters. The ostensible purpose of the Industrial Intelligence Officer who had been appointed in July 1920 in the Industries Department was to collect information bearing on the industrial development of the province. Practically, the whole of the officer's time, however, was occupied with labour matters, and therefore, in March 1922, a separate Labour Intelligence Officer was appointed directly under Government to deal solely with labour matters.

Connected with this official interest in labour was a fifth development, the organization of official machinery for settling labour disputes. In January 1921 two strikes—one of the taxi drivers and another of the tramwaymen, both in Calcutta—were settled by the appointment by Government of committees to enquire into the grievances of the workmen and to recommend measures for settlement. A still more notable example was the creation, in July 1921, of a Conciliation Board to deal with a strike on the light railways around Calcutta. The findings of the Committee were accepted by both parties. After this strike, Government, by an official resolution, definitely constituted a panel of leading public men from which conciliation boards could be selected to deal with industrial trouble in public utility services.

Emigration to the colonies.—Originally with the object of conserving man-power in India for the purposes of labour connected with the war, indentured emigration to the West Indies and Fiji was prohibited throughout the period. In 1920 arrangements were

also made for the reception in Calcutta and the despatch to their homes of batches of emigrants who had voluntarily accepted repatriation from Natal at the expense of the Union Government of South Africa. In the same year a difficulty arose regarding returned emigrants from Fiji and other colonies. Many of them found that there was no place for them in India and expressed a desire to return to their colonial homes. In suitable cases (except to South Africa) arrangements were made accordingly, and, finally, in April 1921 a voluntary organization called "The Emigrants' Friendly Service Committee" was formed in Calcutta to assist returned emigrants from foreign countries.

Inland emigration.—The most important event in connection with inland emigration was the prohibition in 1917 of recruitment otherwise than in accordance with chapter IV of the Assam Labour and Emigration Act, 1901 (IV of 1901) in the districts of the Dacca, Rajshahi and Chittagong divisions. By this measure one of the loopholes for evading the provisions of the Act was closed, as from the areas mentioned, where uncontrolled recruitment was legally permissible, attempts had been made to pass on to Assam labourers who had been recruited in Chota Nagpur and elsewhere ostensibly for employment in the tea-gardens of the Dnars and Chittagong. The numbers of emigrants to the tea-gardens of Assam fluctuated in a remarkable manner. In the year ending the 30th June 1918, a year in which there was a bumper winter rice-crop, only 9,808 emigrants were despatched to Assam, Cachar and Sylhet, but in the year ending the 30th June 1919 no less than 119,883 (only 2,364 were recruited from Bengal) were despatched, as a result of the scarcity and high prices of foodstuffs prevailing in the recruiting districts. Less than half the number emigrated in 1919-20 and in 1920-21 only 13,051, mainly owing to the depression of the tea industry.

CHAPTER VII.

Local Self-Government.

District and Local Boards.—A large mass of the work of the province relating to such matters as public health, sanitation and education is performed by or through the agency of district, local and union boards and municipalities. These activities are illustrated by the varied miscellany of requests with which Lord Ronaldshay had to deal in his replies to addresses of welcome from district boards and municipalities. He visited the headquarters of every district in the province and also went into the interior for the purpose of gaining first-hand information or for the purpose of opening local undertakings such as the Rajbari Water-works. The work of the board, etc., will be dealt with in its proper place; meanwhile the machinery for its performance, which these bodies represent, demands notice. It was recognised, in conformity with the spirit of the reforms scheme of Government, that in the present stage of local self-Government in Bengal the political education of such bodies was becoming of more and more importance. Therefore, both in the case of district and local boards steps were taken to free them from official tutelage. An experiment of appointing a non-official to be chairman of the Murshidabad district board instead of the Magistrate of the district had been made at the end of the previous administration. In November 1917 Lord Ronaldshay and his Government decided to extend the experiment further by giving five selected district boards (including that of Murshidabad) the privilege of electing their own chairmen. In the light of the experience gained, this privilege was extended to fifteen more boards, the announcement being made by His Excellency when the Maharajahadhiraja Bahadur of Burdwan was in charge of Local Self-Government at the conference of representatives of district boards held at Government House in December 1919. They received it with enthusiasm. Finally, in 1921 the privilege was given to the remaining five boards. It is noteworthy that the Maharaja Bahadur of Krishnagar became chairman of the Nadia district board. It was also decided in order to secure an elective majority that the proportion of elected members in district boards should be raised from one-half to two-thirds; the total number of members on each board were also increased. A similar policy was followed in the case of subdivisional local boards. Certain local boards to whom the elective

system had not been already extended were given that privilege; whilst in 1921 in the time of the Minister, it was decided that no official member of a local board should stand for election as its chairman and that the existing official chairman, viz., the sub-divisional officers, should, make room for non-officials. Within the period of Lord Ronaldshay's administration the whole position has therefore been changed and a non-official executive is now responsible for the administration of the Local Self-Government Act under the Minister for Local Self-Government and Public Health, Sir Surendra Nath Banerjee. In the district of Darjeeling which is a "reserved" area and not under the control of the Minister, it was decided as a first step towards the development of self-government that a district board with three subdivisinal local boards should be formed in that district. The inauguration of district board conferences which on Lord Ronaldshay's invitation have met annually for the last three years at Government House has been greatly appreciated by the district boards and has enabled Government to obtain useful first-hand opinions from the representatives of these bodies.

Village Self-Government Act, 1919.—Local bodies called union committees, which were representative of still smaller areas than subdivisions, were also recognized by the Local Self-Government Act and were rapidly increasing in numbers and importance before their merger into union boards under the Village Self-Government Act, 1919. At the commencement of the period their numbers stood at 156 and the elective system was subsequently introduced in a number of them; by the time of the passing of this Act their numbers had increased to 383 and their work had paved the way for the fuller measure of village self-government now in force. The origin of this very important measure must be traced back to the District Administration Committee who submitted a report in the year 1914 recommending, *inter alia*, the establishment of a net-work of village authorities who should combine the functions of union committees and chaukidari-panchayats and also form a village judiciary. In fact the committee advocated the development of the indigenous panchayati system in which the ordinary unit of administration should be the individual village. The whole system, it was proposed, should be controlled or advised by Circle Officers. A bill was accordingly drafted to carry the recommendations of the committee into effect and it was on the stocks when Lord Ronaldshay arrived. His Excellency immediately took the earliest opportunity of seeing facts of village-life for himself and of obtaining first-hand

knowledge regarding it by making excursions unaccompanied by any formality to different villages. He was struck with the dirtiness and absence of sanitation, with the presence of rank vegetation which it was no one's business to remove and with the inadequacy of the water-supply. He was also impressed by the absence of a proper local organization for dealing with these and other defects and by the absence of a really efficient link between the district administration and the people. He therefore proceeded energetically to have the Village Self-Government Bill, of which he claimed to be the foster-father, thrown into proper form for dealing with the two defects mentioned above, by—

- (1) substituting for the chaukidari-panchayat, an unpopular and unwilling body, a popular and willing village authority called a union board vested with the powers and duties necessary for the management of communal village affairs and entrusted with powers of self-taxation for that purpose; and
- (2) introducing a Circle Officer, as an intermediary between Government and the people, and thus bringing the administration into close touch with the villagers.

The bill became law in 1919 under the title of the Bengal Village Self-Government Act, 1919 (B. C. V of 1919). The Act was extended to the whole province except Malda and Chittagong; but its actual operation is only in gradual course of introduction, for the full recruitment of Circle Officers was retarded for financial reasons and it was therefore impossible to provide the proper number of officers to prepare the ground for the unions.

Union Boards.—There are, however, over 2,000 unions in existence; and a few union courts and benches were established with members of union boards to try petty civil and criminal matters. Many of the union boards already display a keen sense of responsibility and corporate activity. In the district of Midnapore, however, the privileges of self-government were withdrawn as the villagers manifested an unwillingness to possess them, an unwillingness which was caused by the machinations of non-co-operators. The interest taken by His Excellency in village self-government is demonstrated, if any further demonstration is necessary, by the fact that he made it a practice to address the presidents of the union committees and panchayats of the district of Dacca at the annual meetings which are a feature of the administration of that district.

Municipalities.—In the case of municipalities the process of freeing them from official tutelage had been nearly completed in the

previous administration; and at the close of the present administration only 5 out of 116 municipalities had not obtained the privilege of electing their own chairmen. The action, which attracted most interest in the period and which His Excellency defended in the Legislative Council, was the supersession in 1918 by Government for a year of the municipal commissioners of the municipalities of Pudukkottai and Hooghly for gross and persistent mal-administration. They were replaced during this period by local officers of Government who were able to introduce substantial reforms. As an experiment certain municipalities were given in 1919 the privilege of co-opting commissioners or "aldermen" to be appointed by Government in order to secure the services of persons who would not stand for election. Many of the municipalities are too poor to afford an up-to-date administration, but, in many cases, owing to an aversion from higher taxation, which is not peculiar to India, the commissioners were content with an income barely sufficient for the minimum requirements of municipal administration. On the other hand the interest in civic affairs continues to increase and, in most towns, the ordinary municipal services are moderately efficient.

Calcutta Corporation.—The Calcutta Corporation enjoyed considerable prosperity during the period and its revenues expanded greatly. During the war, however, it had been compelled to curtail its expenditure on capital works and to husband its resources in order to meet loan liabilities, but with the cessation of hostilities the position became easier and many schemes of improvement were undertaken. The question of the general amendment of the law contained in the Calcutta Municipal Act governing the constitution of the Corporation and regulating its administration has been on the tapis for some time. As long ago as July 1913 a resolution was published by Government outlining the main suggestions which had been made for the amendment of the Act and inviting criticisms thereon. Subsequently, a bill was drafted and introduced in the Legislative Council at the end of 1917 and circulated for opinion. It was, however, withdrawn in 1919 as there was a practical unanimity of opinion amongst the Corporation and other local public bodies and associations consulted that the constitution proposed in it was not of a sufficiently democratic nature and was incompatible with the principles of local self-government then recognized.

Calcutta Municipal (Amendment) Bill.—A fresh bill was accordingly framed and introduced into the Legislative Council in November 1921 bringing the municipal administration of the city into line with

the reforms scheme of government and providing for a more democratic constitution. If the bill is enacted, the number of members of the Corporation will be substantially increased and nine-tenths of them will be elected by the different constituencies and the remaining tenth appointed by Government. For the first time, an Indian chairman was appointed in 1921, viz., Mr. J. N. Gupta, M.B.E., I.C.S.

The Ghi Adulteration Act.—The Calcutta Municipal Act was, however, amended by the Calcutta Municipal (Amendment) Act, 1917 (B. C. I of 1917), for the purpose of enabling more stringent measures to be taken for securing the purity of ghi than were possible before, by penalising the manufacture, storage and sale of adulterated ghi. This Act is commonly called the Ghi Adulteration Act, and its introduction has an interesting history. The extent to which ghi was being adulterated with animal fat and other substances both injurious to health and repugnant to their religious notions and the sudden discovery of this fact had created considerable consternation amongst the Hindu community. Special enquiries were made by the Marwari Association and, as a result of the exposures which they led to, a large body of Brahmins undertook a purification ceremony which had the effect of exciting considerable feeling. Shortly afterwards a large deputation, headed by the Maharajadhiraja Bahadur of Burdwan, who was not then on the Executive Council, waited on Lord Ronaldshay on a Friday and urged immediate action by Government to prevent the adulteration of ghi, particularly in view of the approaching celebration of the religious ceremony of the Durga Puja for the proper performance of which a supply of pure ghi was essential. In view of the strong and general demand for immediate action, emergency legislation was at once undertaken by Lord Ronaldshay and the Ghi Adulteration Act was enacted on the following Tuesday. This is probably one of the quickest pieces of legislation on record in Bengal. It was successful in allaying the popular excitement, whilst the quality of ghi in Calcutta has improved generally.

Calcutta-hackney Carriage, Act, 1919.—By the Calcutta Hackney-carriage Act, 1919 (B. C. I of 1919), the hackney-carriage department which had been under the control of the Corporation since 1878, was transferred to the Commissioner of Police. Incidentally rickshaws, which were being used in increasing numbers in Calcutta, were brought within the purview of the Act.

Bengal Cruelty to Animals Act, 1920.—During the period a proposal for the establishment of a separate veterinary department of

the Corporation which should, *inter alia*, take over the Government control of veterinary work in the city, came under discussion, and was approved.

This department will, when it comes into being, also take over work in Calcutta in connection with the Bengal Cruelty to Animals Act, 1920 (B. C. I of 1920). This Act amended and consolidated five separate enactments on the subject under which the law had become involved and difficult of administration; and, in the second place, it strengthened and added to the existing legislation in certain matters to which attention had been called by a committee which was appointed in 1915. The chief of these related to overloading of carts, in respect of which the law was defective; and the Act contemplates a system of weigh-bridges where overloaded carts can be weighed. The law was, at the same time, made more stringent in respect of the working of unfit animals and of certain objectionable practices.

Calcutta water-supply.—The difficult question of the improvement of the water-supply of the city which had been under the consideration of the Corporation for several years was decided in 1921. The present supply had long been recognised as insufficient for the needs of an oriental population living under tropical conditions; and all efforts to introduce a continuous high pressure supply had failed. Accordingly early in 1920 an expert was brought out from England to advise upon the whole problem. He recommended the adoption of a scheme calculated to cost 330 lakhs, but in 1921 a modified scheme costing a little over two crores was sanctioned in its place.

Other activities of the Corporation.—Amongst the varied activities of this capably managed Corporation the contemplated scheme for a dairy farm with a city dairy, the establishment of a municipal market, the opening of depôts for the sale of Burma rice when Bengal rice was so expensive, and the introduction of motor traction for the removal of refuse are interesting items.

Calcutta Improvement Trust.—The war, the land boom, the scarcity of house accommodation and the abnormal rise of rents in Calcutta, all had their effect on the work of the Calcutta Improvement Trust. Owing to the war, its investments in Government securities were depreciated and the engineering materials required for its operations not only rose greatly in price but were frequently unobtainable both during and after the war. Nevertheless, the Trust made steady progress with the important work, which it had begun in 1912

and undertaken mainly under the Chairmanship of Mr. C. H. Bom-pas, C.S.I., I.C.S. Large areas, which were formerly congested and insanitary slums have now been transformed beyond recognition; and a system of main streets for Calcutta has been adopted in the form of either improvement schemes or alignments. Moreover, it was not till the year 1921 that arrangements were made for a loan of 50 lakhs from the Imperial Bank of India, though the necessity for an earlier loan had been contemplated when the Calcutta Improvement Act was introduced. The land boom was an offshoot of the war: many persons in Calcutta had made large profits from trade carried on under war conditions and consequently had large sums of money to invest; and land was a favourite form of investment. This led to a temporary large increase in the receipts of the Trust; and building sites acquired by them were resold by public auction at a substantial profit until for the reasons given below this policy was modified. The scarcity of house accommodation was another offshoot of the war owing to the failure of building operations in the city to keep pace with the increase of population, for one reason because of the high price and difficulty of obtaining building materials. This and the land speculation led in their turn to an abnormal rise in rents, which was unscrupulously applied to old houses. This impelled the Trust to three decisions. The first was to turn its attention more particularly to rehousing schemes. In the case of the poorer and working classes displaced by the execution of improvement schemes the Trust, following the natural tendency of the working classes to live in the sort of hut to which they were accustomed, acquired selected areas in the suburbs for the erection of sanitary huts on well-raised plinths. Several of these and other rehousing schemes are approaching completion. Later, the Trust decided that the demolition of houses acquired in connection with improvement schemes should not be undertaken as long as persons who would be dishoused found it impossible to rebuild at a reasonable price. Incidentally this seriously affected the purse of the Trust as it resulted in a considerable amount of capital spent in land acquisition being locked up instead of being returned with a profit. In the third place, the Trust ultimately determined to confine their attention to the construction of main roads in the richer part of the centre of the city in preference to the development of suburban areas. In the year 1922 the Calcutta Improvement (Amendment) Act, 1922 (B. C. I of 1922), was passed restoring the usual 15 per cent. solatium in the case of land compulsorily acquired by the Trust which is payable under the ordinary

Land Acquisition Act, but was purposely omitted from the Calcutta Improvement Act, 1911.

Calcutta Rent Act, 1920.—The abnormal rise in rents in Calcutta was dealt with by Government by the enactment of the Calcutta Rent Act, 1920 (B. C. III of 1920). This measure arose out of a resolution moved by Mr. W. H. Phelps in the Legislative Council in 1919 that a committee should be appointed to enquire into the causes of the excessive land values and high rents in Calcutta, and, if possible, to suggest remedies in connection with the matter. A committee was accordingly appointed, but the action proposed by it was not considered adequate by Government who forthwith introduced a bill to restrict rents. It evoked much discussion, both in the Council and the press, but, on the whole, its reception was favourable. It prescribed a standard rent for all premises in Calcutta which (generally speaking) is 10 per cent. above the rent passed on the 1st November 1918, a date selected as being prior to the abnormal rise in rents. No increase above the standard rent is recoverable and no tenant can be ejected as long as he pays the standard rent. The Act, which follows the general lines of similar legislation in Bombay and Rangoon, applies to all premises let for residential purposes or for shops or offices, and includes hostels and boarding houses. It will be in force for three years from the time it came into force and does not apply to premises erected after, or in course of erection at the time when, it came into force. A Controller of Rents was appointed immediately after the passing of the Act, and has since been fully employed with numerous applications for the settlement of standard rents. The passage of the Act indirectly served as check on land speculation.

General advance in local self-Government.—The following words taken from Lord Ronaldsday's speech at the opening of the District Board Conference on 8th March 1922 illustrate the advance which has been made in local self-Government:

"I have no desire to detain you further, but before asking the Hon'ble Minister to take the chair, I would like in view of the fact, that this is the last occasion I shall have of addressing the representatives of district boards of this province, to express my feelings of satisfaction that, in spite of many pre-occupations arising in the first place out of the war, in the second place, out of financial stringency, and in the third place, out of grave political unrest, I have witnessed during the past five years a steady and a satisfactory advance in the matter of local self-Government. During the past five years I have seen the district boards placed on a

sound self-governing basis. I have seen the introduction and the passage of the Village Self-Government Act, and I have seen in a number of districts the steady creation of these small village self-governing bodies which, I am convinced, are bound to prove of such great value to the village population. I naturally view with great regret the thoughtless and mischievous agitation¹ which has been carried out against the union boards in some districts in the Presidency; but after all, these political agitations are ephemeral; they come and they go, and, I feel convinced that the foundation of village self-government has been well and truly laid, and that in future, in spite of all possible temporary set-backs we shall see a net-work of these self-governing units spreading over the whole of the Presidency to the immense advantage of its people."

¹ By non-co-operation agitators.

CHAPTER VIII.

Public Health.

Public Health—Influenza.—The year 1917 was remarkably healthy, but in the year 1918 a severe epidemic of influenza swept in two distinct waves over the province and continued in a milder form through 1919, 1920 and into 1921 leaving behind a disastrous aftermath of minor ailments and impaired national vitality. Owing to deaths from influenza being largely ascribed to fever, it is impossible to gauge accurately the total mortality, but it is estimated that the epidemic took a toll of not less than three-quarters of a million lives. Probably, during the three years in which the disease was most prevalent, at least half the population suffered from an attack of influenza. The death-rate for the province in 1918 and 1919 was, therefore, exceptionally high. The birth-rate in the year 1919 was also exceptionally low owing to economic pressure resulting from the poor harvest of 1918-19, combined with the effect of high prices, the prevalence of influenza and the consequent excessive mortality. In 1920 the province began to recover, though conditions did not become entirely normal within the period, and in 1921 a number of districts still showed an excess of deaths over births.

Cholera—Small-pox—Plague.—The mortality from cholera was very high in 1919; and the disease was also very prevalent in 1921. In the latter year two successful anti-cholera campaigns were carried out by the district boards of Howrah and Mymensingh with the help of the department of Public Health. After a very low mortality from small-pox in 1917 and 1918 there was a high mortality in 1919 and 1920 followed by an exceptionally low death-rate in 1921. In 1921 vaccination was made compulsory by the extension of the Bengal Vaccination Act (B. G. V of 1880), as amended by Act II of 1911 throughout the province; and a number of local authorities took the opportunity to provide free vaccination for the populations under their charge. Plague was little in evidence and was confined to Calcutta and Barrackpore.

Anti-malarial campaign.—About three-fourths of the deaths in the province are attributed to "fever", and, whatever diseases besides malaria this may connote, it is estimated that every year there occurs upwards of 400,000 deaths from malaria alone; and, if the

number of attacks which do not terminate fatally is considered, this mortality is a small fraction of the ravages of the disease. For some time Lord Ronaldshay had charge of the portfolio of sanitation; and he stimulated the sanitation department to increased activity in the matter of malarial research and, the irrigation department to greater efforts in the preparation and execution of anti-malarial irrigation schemes. From the first he had determined to do all that was in his power to make some advance in the fight against the scourge; and he gave the whole question his close personal attention. On the 31st March 1917 in reply to an address of welcome he announced his hope that it would be possible to organize a systematic and scientific crusade against the disease; and, in January 1918 he inaugurated his anti-malarial campaign in an address to the district boards of Nadia, Jessore and the 24-Pargannas whom he had invited to Government House, Calcutta. In that address¹ he called the attention of the district boards to the virulence of the malarial and invited their co-operation in the work of combating it, which as he indicated was mainly a matter of embankments and sluices, an engineering problem. The conditions of the east of the province are in the main adverse to malaria, owing to heavy rainfall and abundant natural irrigation with flood water from the rivers. But the remainder of the province with its dead and dying rivers and a deranged drainage system are peculiarly adapted for the propagation of the varieties of mosquitoes which carry the parasite of malaria in Bengal. Now it had been demonstrated that, by a proper drainage scheme in which the inflow of silt-laden water and the outflow of rain-water could be properly regulated by a system of embankments and sluices, it was possible to convert a fever-laden swamp, full of shallow pools which are the favoured breeding grounds of the anopheles mosquito, into a healthy and productive area; but Lord Ronaldshay was the first administrator to realize from this demonstration the fact that the main principle underlying anti-malarial measures was the necessity of providing and regulating a continuous flow of water and not of merely removing water, *i.e.*, irrigation and not drainage. He, therefore, determined to proceed on these lines and he placed before the district boards concerned the important Arul Bil, Jabuna and Nowi-Sunthi projects, which were accepted by them and were taken up by the irrigation department. The execution of such schemes is now governed by the new Bengal Agricultural and Sanitary Improvement Act, 1920, which has replaced the Old Sanitary Drainage Act. Government offered substantial contributions

¹ Printed in extenso in Appendix V.

towards the financing of these projects and, moreover, undertook others of which the whole cost was borne by the State. These anti-malarial schemes, which were designed under the direct supervision of Mr. Addams-Williams in consultation with Dr. Bentley, serve the double purpose of securing the crop and destroying the breeding grounds of the anopheles mosquito. The Arul Bil project is designed to deal with 53 square miles of country in the district of Jessore; the Jahana project embraces a tract of 362 square miles in the districts of Jessore, Nadia and the 24-Parganas and the Nowi-Sunthi scheme deals with 146 square miles. The low-lying areas included in all these projects, where regulation of the surface and ground water will be provided by sluices, will benefit from the point of view of malaria. Fair progress was made in the execution of all these projects; whilst the smaller Bharagachi and Manikhali projects in the 24-Parganas and the Saraswati project in the district of Howrah were started and completed during the period at the expense of Government. Amongst other projects which were commenced during the period may be mentioned the Amta project in Howrah and the Pichaboni and Aminabad projects in Midnapore. At the same time many other projects, both small and large, like the Bhairab project in the north-western portion of the district of Jessore which is designed to divert a portion of the spill water from the Ganges and Gorai rivers south-westwards so as to give a flush over a tract of country of about 800 square miles, were under examination and investigation. The Bhairab project, a difficult scheme in which Lord Ronaldshay was keenly interested, deals with one of the most malarious tracts in the province and should prove to be the most effective of the schemes. Meanwhile, other methods of attack were under investigation. * For instance where, as in the Duars, the mosquito breeds in open running water, under-ground channels have been constructed below the natural bed of the stream; when a mild current favours the fly, a combination of flushing and sub-soil drainage is employed. Four experimental anti-malarial schemes known as the Menghus, Jangipur, Singarum and Banka Valley projects were, therefore, devised to destroy the breeding grounds of the mosquito. These were carried out. The sanitation department also continued its research work and it conducted several malarial surveys. In particular, in 1921 a malaria observatory to collect and correlate the various data relating to sickness, the prevalence of the anopheles mosquito, rainfall, temperature, humidity, sub-soil, water-level, etc., for a definite area was established at Sonarpur. This is believed to be the first observatory of its kind which has been established anywhere. At the

close of the period an exhaustive report by Dr. Bentley, the Director of Public Health, was under submission to Government dealing with the whole problem which is fraught with considerable difficulties on account of the costliness of the most direct methods of attack.

Hookworm.—Another disease in which His Excellency took an interest was anchylostomiasis or the hookworm disease. The researches made by Lieutenant-Colonel Clayton Lane, I.M.S., had previously brought to light the prevalence of the disease in the district of Darjeeling. Subsequently a systematic enquiry revealed the fact that the percentage of infection varied from 48 to 86 per cent. in different districts. This disease is responsible even in cases of mild infection for lowered vitality, anæmia and inertia and it seems clear that it is largely responsible for the small out-put of labour in Bengal. Impressed by its ill-effects, and by the large proportion of the population, which might be as much as 80 per cent. or 36 million persons, affected by the disease, and by the apparent ease and cheapness with which it could be cured, Lord Ronaldshay took up the question of its prevention and cure in the year 1918. Finally, three special Deputy Sanitary Commissioners with a subordinate staff were appointed to introduce and supervise operations in the collieries, the tea-gardens, the mills near Calcutta, the railways and certain rural areas. In 1920 the work which had been accomplished was reviewed and it was found that valuable investigation work had been done, a knowledge of the disease and its effects had been spread and progress had been made in the establishment of centres for its diagnosis and treatment. Unfortunately treatment was found very difficult and, apart from the work done in the mill areas and at Kalimpong, only about a thousand persons submitted to it. The financial position was also difficult and the campaign was accordingly abandoned in 1921.

Department of Public Health.—For some time there had been complaints that the sanitation department was over-worked on account of its increasing activities. Accordingly in 1919 Lord Ronaldshay appointed a committee under the chairmanship of Mr. C. F. Payne, I.C.S., to enquire into the organization responsible for the supervision of the public health of the province (apart from the question of medical treatment) and to advise regarding its reorganization and the position of connected officers and bodies in regard to it. As a result, the sanitation department was put on a proper footing, as the department of Public Health in 1921. Three assistant Directors of Public Health were appointed to deal respectively with vital statistics and vaccination, industrial hygiene and school hygiene; the appointment

of an additional malaria research officer was created and the Port Health Department under the Director of Public Health was reorganized and two more Assistant Port Health officers were appointed for Calcutta.

Local public health officers.—His Excellency was also struck by the extreme inadequacy of the local machinery for dealing with the whole question of public health. It was impossible for the Civil Surgeon, the official medical officer of a district, with his multifarious and arduous duties to discharge the functions of a health officer as well. Moreover, he was not a subordinate of the district boards. Lord Ronaldshay accordingly decided that each district board ought to appoint, following the example of the district board of Burdwan, a properly qualified medical health officer. These orders have been given effect to in most districts.

Duars tea-gardens—Public health.—The question of the public health of the tea-gardens in the Duars came under consideration. It had been raised about twelve years ago, but it had been decided that, whilst it could be left to the good sense of the planters to improve medical and sanitary arrangements in the tea-gardens, there should be a reliable record of births and deaths amongst the coolies. The Jalpaiguri Labour Act of 1912 was accordingly passed and an annual report on its working is submitted to Government, in which the Civil Surgeon also reports on such matters as sanitation, water-supply and medical arrangements. On the one hand, however, Government did not consider this a satisfactory solution as it gave them no power to compel the tea-gardens to look after the health of the coolies, whilst, on the other hand, the planters themselves realised the necessity for combination and for scientifically organized effort to fight disease on their gardens. A discussion followed and, finally, at a conference of the persons interested held in Darjeeling in 1920, it was decided to follow the procedure adopted in the Asansol Mining area, where the Asansol Mines Board of Health working under the Bengal Mining Settlement Act had done conspicuously good work, and to legislate for the sanitation of the tea-gardens in the Duars on similar lines. A bill (the Duars Tea-gardens Sanitation Bill) was therefore prepared to give effect to this proposal.

Bengal Food Adulteration Act.—Owing to the fact that the previous law had been entirely ineffective in checking the evil of the adulteration of food, particularly of articles of common consumption such as milk, ghi, mustard oil, etc., the Bengal Food Adulteration Act, 1919 (B. C. VI of 1919), was passed in order to

remedy the defects in the law. The operation of this law was extended to all municipalities in 1920 and to the Asansol Mining area in 1921. Public analysts were appointed under it and its provisions put into force. So far it is reported that there has been a marked improvement in the quality of retail mustard oil.

Bengal Juvenile Smoking Act.—Another Act connected with public health is the Bengal Juvenile Smoking Act, 1919 (B. C. II of 1919). This is the first Act for which a non-official member of the Bengal Legislative Council was responsible. Its object is to discourage cigarette smoking amongst juveniles. Its effect is however problematical.

Medical education.—In medical matters Government are confronted with the expensive problems of meeting the great demand in Bengal for medical education, for an adequate supply of medical practitioners, particularly in rural areas of the type of doctors corresponding to the country doctor in England, and for a sufficient number of hospitals or dispensaries. In fact the demand for medical education is enormously in excess of the supply and it will be many years before the needs of the country and the aspirations of the educated class for a career for which they are peculiarly fitted can be satisfied. Meanwhile, Government have been trying to make good this deficiency. At the very beginning of the period the sanctioned strength of the students in the Campbell and Dacca medical schools was increased, whilst more recently the rules for admission to the Medical College, Calcutta, have been revised in view of the numerous numbers of applications for admission. At the latter college, hostels for medical students are under preparation; and a scheme has been sanctioned for the establishment of a Dental School to be attached to it, which will be taken up when funds are forthcoming. An important advance in medical education was marked by the opening of a new medical school called the "Ronaldshay Medical School" with accommodation for teaching 200 students at Bardwan in 1921. This was in pursuance of the policy of the establishment at different centres throughout Bengal of medical schools designed to provide the province with a steady output of medical men with a sound training in medicine on up-to-date lines in order to meet the urgent need for such practitioners in rural areas. Proposals also for the establishment of medical schools elsewhere are under the consideration of a committee appointed by the Minister for Local Self-Government and Public Health, Sir Surendra Nath Banerjee, whilst definite progress has been made towards the establishment of such a school in Mymensingh. The possibility of the establishment of the

school at Burdwan was largely due to the generosity of the Maharajahthiraja Bahadur of Burdwan.

School of Tropical Medicine and Hygiene.—The School of Tropical Medicine and Hygiene was opened on the 15th November 1921. This important institution was originally completed several years ago, but could not be opened on account of conditions arising out of the war. In 1917, however, it was decided that the school, which was originally designed to teach only for the diploma on Tropical Medicine, should be combined with a new Institute of Hygiene for post-graduate training in hygiene for the diploma of Public Health, thus rendering necessary the construction of additional buildings. The administrative staff was appointed in 1920. Research work has also been started out of the funds contributed by the different Indian tea, jute and mining associations and by certain private firms and gentlemen. The public were most liberal in subscribing to this institution; and it was one in which Lord Ronaldshay took the keenest interest not only because it would provide a sufficiency of medical men qualified in public health, one of the foremost requirements of the province, but because it removed the anomaly that in India, the home of tropical diseases, there was no centre for the treatment and the study of such diseases. He formally opened it on the 4th February 1922. The Carmichael Hospital for Tropical Diseases which is attached to the school, and for which funds were raised by Sir Leonard Rogers, whose discoveries in the treatment of cholera and of leprosy are so well-known, was also opened in November 1921.

Rural practitioners.—At the same time an attempt was being made to solve the problem of the actual difficulty of obtaining qualified medical aid in rural areas, a difficulty which is intensified by the tendency of medical practitioners to gravitate to the large towns, by subsidising qualified men who agree to start work in such areas, and supplying them with medicine. This attempt was made by the district board of Jessore, whose example has been followed in some other districts. The subsidy will only be given by the boards for three years, at the end of which time the recipient should have established his practice, and in return for it certain reports have to be submitted and schools have to be medically inspected. It remains to be seen whether these medical men will remain in the rural areas on the completion of the three years, but the scheme gives promise of some success.

Dearth of medical officers owing to the war.—The Medical Department itself was severely handicapped by a dearth of officers

owing to their deputation to military employ both during and for some time after the war. This, however, gave numerous civil assistant surgeons a unique opportunity of showing their worth as officiating civil surgeons; they also got ample opportunities of volunteering for temporary commissions in the Indian Medical Service. Altogether 17 permanent and 20 temporary officers of this class were awarded temporary commissions and two officers, one permanent and one temporary, were granted commissions in the Indian Medical Service.

Hospitals and dispensaries.—Various extensions to the Calcutta Medical College Hospital, which is now one of the largest institutions of its kind in the world, were under construction during the period. The chief were a special hospital for eye, ear and throat cases, a tuberculosis ward, nurses' quarters and servants' quarters. Improvements were also effected in the Campbell Hospital. All the Government hospitals in Calcutta are, however, more or less over-crowded; and the establishment of separate hospitals for incurables, convalescents and infectious diseases began to receive attention. The Dacca Mitford Hospital was reconstructed and transferred to Government management. The number of hospitals and dispensaries outside Calcutta continued to increase, but not in proportion to the demand for medical assistance, a fact to which Government drew the attention of district boards, who are responsible for their establishment in rural areas, on more than one occasion.

Lepor asylums.—The question of leprosy attracted public attention during the period, and in 1919 its prevalence in the City of Calcutta was discussed in Council on the motion of Sir Frank Carter. In Bengal this disease is treated chiefly at the three leper asylums at Gobra, which is maintained by Government, and at Raniganj and Bankura, which are under the Mission to Lepers, but are helped by Government. The arrangements in these asylums are, however, often inadequate and their accommodation is insufficient. A scheme was, therefore, drawn up by the Surgeon-General, the late Major-General Robinson, in consultation with the Mission to Lepers for the segregation of lepers in the leper colony and land was selected for a site in Midnapore in 1921. Meanwhile, the Government of India had amended the statutory definition of leper in the Leper Act, so as to include a pauper leper in any stage of the disease; and this will facilitate the segregation of a large number of the afflicted.

CHAPTER IX.

Education.

Education.—The history of education during the years 1917-22 is marked by five important events. The first was the visit of the Calcutta University Commission to Bengal in the years 1917 to 1919 with its coterie of distinguished members. The second was the enactment of the Primary Education Act in 1919. This was introduced in the Legislative Council by a non-official member and is a first step towards compulsory primary education in Bengal. The third was a marked expansion in the demand for technical and industrial education owing to the industrial development of the province with the transfer of the control of such education to the Director of Industries in 1920. The fourth was the transfer of the department of education (excluding European education) to the charge of the Minister for Education, Mr. P. C. Mitter, in January 1921 under the reforms scheme. The fifth and last was the inauguration of the Dacca University on the 1st July 1921, a measure of the first importance as it gave the inhabitants of Eastern Bengal, in particular the large number of Muhammadans in it, an up-to-date university which they could regard as their own. It is with the last measure that the name of Lord Ronaldshay will always be associated as he was the first Chancellor and the details of its foundation and constitution were finally framed under his guidance, when the Maharaja Sir Raja Bahadur of Burdwan was in charge of Education, before submission to the Government of India.

Control of education—Services and establishments.—In accordance with the reforms scheme of Government, the administrative control of the Education Department with the exception of European education was transferred to the Minister in charge of Education; at the same time the Director of Public Instruction was appointed *ex-officio* Deputy Secretary to the Government of Bengal in the Education Department. As a result of the recommendations of the Public Services Commission, the Indian Educational Service was revised and the officers were classed into three branches of the service—viz., the administrative, the collegiate and the special. Two distinct cadres were formed with different rates of pay for men and women members of the service on the basis of time-scales. Similarly, the Bengal Educational Service was also re-organised and two separate cadres were formed for men and women. A re-organization committee was appointed by

Government to enquire into the pay and prospects of the members of the department below, the Bengal Educational Service in the cold weather of 1920-21, as their salaries had been settled many years ago and with the reference to economic conditions which were quite different from those obtaining now. The report recommended a very substantial increase of pay; and in March 1922 orders were passed by Government on the pay of the teaching and inspecting staff.

Calcutta University.—In September 1917 the Government of India appointed a Commission under the chairmanship of Sir (then Mr.) Michael Sadler on which Mr. W. W. Hornell, the Director of Public Instruction and Sir Ashutosh Mukherjee, the present Vice-Chancellor of the University, sat to enquire into the condition and prospects of the Calcutta University and to consider the question of a constructive policy in relation to the questions it presented from the point of view of the needs of modern life. The terms of the reference to the Commission were very comprehensive; and their report which was published in 1913 travelled over many subjects and many branches of education which are not confined to University instruction but have an important bearing thereon. It is believed that the report will rank among the most important and authoritative of educational documents. Under the reforms scheme, however, the financial responsibility for the University devolved on the Government of Bengal who were unable owing to the serious financial position of the province to proceed during the period in the matter of the reforms advocated by the Commission.

The Dacca University.—The Dacca University was inaugurated with effect from the 1st July 1921; and its court was formally opened on the 17th August of that year by Lord Ronaldshay. The origin of the University dates back to the year 1912 when the Government of India announced their intention of establishing a teaching and a residential University at Dacca to serve both as an example and a test of a new type of University and to afford some relief to the congested state of the Calcutta University. A committee worked out a scheme for the University which was generally sanctioned in 1913, but owing to the war it remained in abeyance until the Calcutta University Commission examined it and reported afresh. In 1919 their recommendations were duly considered by His Excellency and his Government and by the Government of India; and an Act designed to give effect to them was passed in the Indian Legislative Council in 1920. The University is a self-governing institution; and it should prove of great benefit to the Muhammadan population of Eastern

Bengal though, at present, Muhammadans are in the minority in the University. It comprises the Dacca and Jaggannath Halls, the Moslem Hall and the Law College, and it has established Faculties in Arts, Science and Law. The Act also provides for the establishment of Faculties in Medicine and Agriculture which it is intended should be formed as soon as practicable. Mr. P. J. Hartog, C.I.E., M.A., B.Sc., who was one of the Members of the Calcutta University Commission, was appointed the first Vice-Chancellor.

Numbers and expenditure. The total number of institutions, both public and private, rose from 18,373 at the commencement of the period to 53,968 at the end of 1920-21; but the number of pupils did not increase in the same proportion, but only from 1,918,132 to 1,945,145 owing to the adverse economic conditions of the greater part of the period and to the non-co-operation movement, the effects of which on education have already been noticed. The total expenditure, however, rose still more rapidly on account of the increased cost of education, manifested in the cost of books and so forth and in the pay of teachers, from 255 lakhs in 1917-18 to 309½ lakhs in 1920-21; and, even then, the pay of a large proportion of the teaching staff remained to be raised. About one-sixth of the pupils are girls.

Collegiate education.—During the period the Carmichael College at Rangpur and two new colleges teaching up to what is known as the Intermediate standard of the University course, one at Faridpur and the other at Bagerhat, were established, though the concentration of students in the Calcutta colleges is as noticeable as ever. In accordance with the recommendations of the Calcutta University Commission, the Dacca University does not admit students to its courses until they have passed the intermediate stage; and it is not lawful for the Dacca University to conduct courses or maintain classes for the purposes of preparing students for admission to the University, whilst no institutions within a radius of five miles from the Convocation Hall of the University can be affiliated to any University other than the Dacca University. Accordingly the old Matriculation and Intermediate classes of the Dacca and Jaggannath colleges were converted into independent intermediate colleges under the control of a Board of Intermediate and Secondary Education which was temporarily appointed for the Dacca University area. One important duty of the Board is to conduct the special *Islamic Matriculation* examination and also the Intermediate examination in the Islamic course, which the Government of India have recognised

as equivalent to the Intermediate examination of an Indian University for the purpose of the admission of students to the Islamic Department of the Dacca University. The recommendation of the Calcutta University Commission regarding the intermediate stage of the University course was not confined to the Dacca University. They, in fact, generally recommended the separation from the University curriculum of the work now covered by the first two years of the present Calcutta University course, the constitution of a new authority to control Secondary and Intermediate Education and the establishment of a system of intermediate colleges, some of which, should contain high school classes. The proposed reform is of vital importance.

Serampore College Act, 1918.—The Serampore College was founded in 1818 by a band of English Baptist Missionaries when Serampore was Danish territory, and was granted a Royal Charter by the King of Denmark in 1827 which authorised the college authorities to confer degrees in science. On the transfer of Serampore to the British Government in 1845, it was laid down in the treaty of purchase that the rights and immunities granted to the college by the charter should not be interfered with, but should remain in force in the same manner as if they had been obtained by a charter from the British Government, subject to the general law of British India. For some time past the college authorities had been desirous of making the college a centre for theological instruction and of granting theological degrees on students of all Christian churches; they also desired to grant degrees in other branches of knowledge. The Serampore College Act, 1918 (B. C. IV of 1918) was accordingly passed in the year of its centenary enabling them to grant these degrees subject to certain safeguards; it also makes certain changes in the constitution of the college.

Secondary education.—A scheme for the improvement of secondary education in the province which had been engaging the attention of the authorities for many years was sanctioned in 1919 and given effect to in 1920. The result was to transfer the head-masters of Government High schools to the Bengal Educational Service, and to classify the other teachers in Government Middle English and High schools as English teachers and vernacular teachers in the Subordinate Educational Service. It was soon seen that this latter arrangement was unsatisfactory in view of the rise in the cost of living, and therefore the re-organization Committee to which a reference has already been made was appointed to examine this question.

It is significant that the numbers of Middle Vernacular schools decreased considerably during the period as there is no demand for a purely vernacular education. Some progress was made in the introduction of manual training classes, where weaving, carpentry, smithy, bamboo and cane-work, tailoring and rope-making are taught. In the previous administration a residential school had been established at Hastings House, Calcutta, as an experimental measure for the education of Indian boys of the wealthier classes. This, often referred to as the Eton of Bengal, was not however popular and was closed down at the end of 1920.

Primary education for boys.—There are over 35,000 primary schools for boys attended by over a million pupils; and the expenditure both from public and private sources on primary education for boys exceeds forty lakhs of rupees. Of these schools more than three-fourths receive some individually small grants from Government and district boards, and about one-eleventh have been built up by public funds and are managed by district boards and, in a few cases, by municipalities. The three-fourths have come into existence in a haphazard fashion, but the large majority of the district board schools were established scientifically under the "panchayati union" scheme. This scheme aims at gradually providing every panchayati union with a lower primary school of an improved type to be managed and maintained by the district board. It was initiated by the late Government of Eastern Bengal and Assam, and, after the constitution of the Bengal Presidency, it was decided to extend the system to Western Bengal, but it had to be suspended in the year 1914-15 owing to the financial stringency caused by the war. It was revived, however, in the year 1918 with the help of a grant from the Government of India.

Primary Education Act, 1919.—An important potential advance in primary education was made, by the enactment in February 1919 of the Bengal Primary Education Act, 1919 (B. C. IV of 1919), which was introduced in the Legislative Council by Babu Surendra Nath Roy. A slight amendment was made to it subsequently by the Bengal Primary Education (Amendment) Act, 1921 (B. C. III of 1921). The object of the principal Act is to extend primary education amongst the masses of the people in all municipalities and other selected areas in Bengal. The Act effects this by making provision in the first place for the primary education of all children between six and eleven desirous of attending school under a voluntary system, and subsequently for the primary education of all boys between six and ten under a compulsory system. The Act also

gives power to levy an education cess as a resource for voluntary education as well as for compulsory education. In accordance with the terms of the Act, the municipalities were then called upon to submit to Government certain statistics and estimates for the extension of primary education. Subsequently, Mr. E. Biss, an officer of the Indian Educational Service, was placed on special duty to work out a practical programme of expansion and improvement in urban and rural areas. In his report detailed schemes for 35 municipalities and 23 union boards were worked out. Government made an offer of half the capital and half the recurring cost, but in December 1921 only two municipalities had accepted the offer. Municipalities hesitated to commit themselves to any large expenditure; the main difficulty was the levying of the education cess which is an essential feature of the scheme. On the other hand both Government and the Corporation have approved a scheme for the improvement of primary education in Calcutta at a capital cost of 20½ lakhs and an ultimate recurring cost of 4½ lakhs which is now in process of introduction. That a great deal remains to be done for primary education in Bengal may be gathered from the following words of the Director of Public Instruction:—

“The condition of primary education in Bengal continues to be bad and the out-look is depressing. The worst feature is the fact that the primary school teacher does not get a living wage. Hence a not inconsiderable number of primary schools are mere make-believes. Children are collected in them to be seen by the inspecting officers of the Education Department but ordinarily the teachers devote the bulk of their time to supplementary or more lucrative avocations. Then the facilities for training primary school teachers are inadequate, whilst many of the older schools, especially those in West Bengal, are hopelessly inefficient.”

In fact the average income of a primary school teacher is much below that of a day-labourer, though much use was made of subventions during the period to raise the pay of teachers in this class of institutions.

Muhammadian education.—Muhammadian education was continued on the lines initiated in the previous administration. The peculiarity of Muhammadian education is that, whereas a proper proportion of Moslem boys attend the primary schools and *maktabs* (purely Muhammadian primary schools) they are largely outnumbered in the other grades of education. In order to remedy this, orders were issued assigning a minimum percentage of places to qualified Muhammadian

students in Government schools and colleges, but the reports do not indicate any striking increase as a result of this measure. On the other hand the number of pupils attending the purely Muhamadan higher grade institutions of madrasas steadily increased owing to the introduction of the reformed madrasa course which embraces both religious and secular instruction. In certain districts special sub-inspectors were appointed for the inspection of *maktabs* exclusively. Since 1918-19 aided *maktabs* in district board areas have been in receipt of grants 50 per cent. in excess of the grants given to ordinary primary schools.

Sanskrit education.--The teaching of Sanskrit is carried on in numerous *lots* on the indigenous system and at the Sanskrit College in Calcutta on modern lines. In 1918 the existing Sanskrit Examination Board was replaced by an organization called the Calcutta Sanskrit Association, which comprised a large deliberative convocation consisting of 150 pandits for Bengal and 50 pandits for Assam and a council, to conduct examinations and award titles.

Education of girls and women.—There was a distinct advance during the period in the education of girls and women, particularly amongst the Muhammadan community. This is largely to be attributed to the attractive nature of the *maktab* curriculum, which includes the teaching of the Koran and the ritual of Islam. Much has yet to be done in the matter of increased outturn of trained women teachers and the provision of decent school-houses with quarters for mistresses. Though social and domestic prejudices are still factors in the situation, speaking generally, the demand especially for secondary education exceeds the supply.

Education of special classes.--A noticeable feature of the period was the growing desire for education amongst the backward classes, in particular amongst the Namasudra community, where it was very keen. The Society for the Improvement of the Backward classes maintains a number of institutions for the education of the various poorer communities and sects; to encourage their educational activities Government sanctioned an annual grant. A scheme for the improvement and expansion of education amongst the Sonthals in the district of Dinajpur was sanctioned by Government on the lines already introduced in the Burdwan Division.

Technical and Industrial education.—Owing to the industrial development of the country the number of students in technical and industrial schools increased, in particular in the mechanical, electrical and mining engineering courses at the Bengal Engineering College at

Sibpur. The Ahsanullah School of Engineering at Dacca was improved and removed to the building formerly used as the Secretariat Press; the old overseers' class ceased to exist and the survey classes attached to it were re-opened. The engineering classes at these institutions are very popular. It has recently been decided that the Bengal Engineering College will concentrate on the training of engineers and that the training of subordinates will accordingly be left to the Ahsanullah School of Engineering. Only these two institutions now remain under the control of the Director of Public Instruction, for on the formation of the Industries Department in 1920 all other technical and industrial institutions were transferred to the control of the Director of Industries. The Government Weaving Institute at Serampore was so popular that annually numbers of applications for admission had to be rejected. In the first year there were only five weaving schools at outlying centres, but at the end of the period there were six such schools as well as seven peripatetic weaving schools under the Principal of the Institute, all doing satisfactory work; the weaving expert (now called the Superintendent of Textile Demonstration) has also done a good deal in the introduction of improved handlooms and weaving machinery and in the demonstration of manipulating processes amongst weavers.

The improvement of mining education in the coal-fields has been under discussion for a long time. It was originally proposed that the cost of the scheme should be shared between this Government and the Government of Bihar and Orissa and the mining interests. The Government of Bengal have now decided to proceed with that part of the scheme affecting this province; the mining interests will contribute to the cost of the scheme and the balance will be borne by Government. Some progress has been made in the necessary buildings and it is contemplated that the classes will begin in the latter half of 1922. The Government Commercial Institute in Calcutta began to attract graduates and Muhammadans, very few of whom had previously sought admission to the institution; and the numbers attending the institute have increased largely. The proposal for the Calcutta Technical School has already been mentioned in connection with industries.

Training of teachers.—There were at the commencement of the period two colleges for the training of English teachers for secondary schools, six normal schools for the training of vernacular teachers and 119 *guru*, *muallim* and special training schools. It had for some time been recognised that the facilities provided by these

guru and muallim training schools for training teachers of primary schools were inadequate; and a comprehensive scheme was, therefore, drawn up in order to improve the quality, and increase the supply of trained teachers by the provision of *guru*-training schools of an improved type in central places. This scheme was sanctioned in 1919 and some progress was made towards the establishment of the improved type of school. The Calcutta University Commission recommended important changes in the organization and curriculum of the training colleges, the latter being considered as too theoretical.

European education.—European education is a reserved subject and has not been transferred to the Minister in charge of Education. Though the general condition of European schools is satisfactory, the great increase in prices has seriously hit them and there is grave difficulty in maintaining institutions in efficiency on their present incomes. None of the schools have any capital to fall back upon and building improvements and extensions are in many cases vitally and urgently necessary. In January 1921 the whole question of European Elementary education was discussed at a conference and certain important lines of development were discussed. A munificent donation of ten lakhs, intended mainly for the progress of education among the domiciled community was received from an European citizen of Calcutta, and in 1919 a trust fund was created for it and a scheme of management was drawn up. The Trust, called the Sussex Trust, provides *inter alia* for the creation of a number of scholarships for European and Anglo-Indian boys and girls for both general and professional education, either in India or the United Kingdom.

Indian art.—It was owing to the initiative of Lord Ronaldsday that the society for the Promotion of Oriental Arts was, with the help of a grant from Government, reconstructed in the year 1919 with the object of forming in Calcutta a centre of Indian culture. He also pursued his endeavours to foster the indigenous arts by holding salons at Government House, Calcutta. The first, which was held in December 1919 was devoted to painting; the second held in December 1920 to Indian music; and the third, which was held in January 1922, to Indian drama.

Registration.—The Registration Department is now under the control of the Minister for Education. There were some remarkable fluctuations in the statistics relating to it which reflected both good and bad harvests and high prices. The number of documents

registered rose from 17½ lakhs in 1916 to over 20½ lakhs in the year 1920, and the gross receipts of the department from over 20½ lakhs to over 27½ lakhs in the same years. In the year 1917 there was a slight decrease followed in 1918 by a very substantial fall which has been attributed to the improvement of the material condition of the agriculturists brought about by the bountiful harvest of 1917-18. There was a marked increase in 1919 which was generally attributed to the bad harvest of 1918-19 and to high prices, followed by another marked increase in 1920 again attributed by some officers to economic difficulties on account of high prices and by others to the fact that the agriculturists had received high prices for their produce and, therefore, had more money to spend on property. The expenditure on the department increased from 10½ lakhs in 1916 to 13½ lakhs in 1920, and is largely accounted for by the general increase in salaries. In the year 1919 an experiment was made in the five districts of Midnapore, Murshidabad, Dinajpur, Mymensingh and Chittagong, on the lines in force in the Madras Presidency of appointing district registrars from the department to perform the work done by the district officers as registrar. The question of its discontinuance was, however, under consideration at the end of the period as it had not been very successful. Most rural registration offices still continue to be housed in unsuitable hired buildings.

In 1918 with a view to improving the administration of the Bengal Muhammadan Marriages and Divorces Registration Act, 1876, fresh rules were framed under the Act and Muhammadan advisory committees were set up in each district outside Calcutta to assist the district registrar in selecting candidates for the post of Muhammadan registrar. The Permanent Committee was used for this purpose in Calcutta, to advise the Inspector-General of Registration on such general questions as might be referred to it and to assist in conducting the departmental examination of Muhammadan registrars. There was a notable increase in the number of ceremonies registered from 65,126 in 1917 to 75,469 in 1920 attributed partly to the growing popularity of the Act, and partly to the establishment of offices within easy reach of registrants.

Views of Lord Ronaldshay on Indian education.—Lord Ronaldshay visited almost every college in the province and had occasion to address many educational bodies during the five years of his administration. He was struck by the quiet responsiveness and patient industry of Bengali students, but as a well-wisher, he inculcated the necessity of the cultivation of a critical faculty to bear upon

their undertakings as a check upon the impulsive enthusiasm which led them aside to support such unfortunate movements as the non-co-operation movement. In the system of education itself there were two main respects in which he desired to see a change. These are described in the following words which he used in his speech at the Annual Convocation of the Calcutta University on the 24th March 1921:—

"I desire to see education given a more practical turn. More facilities provided for vocational training, less exclusive concentration upon purely literary courses. I think there are some grounds for the contention that we have devoted ourselves too exclusively to letters and the law; that it is time that medicine came into its own and that engineering, mining, architecture, agriculture, commerce and industry had their turn. At the same time I would utter a word of caution. There is some danger of the phrase "vocational education" becoming a fetish. Those who see in it a panacea for all our educational ills are likely to experience a rude awakening. A liberal education in Arts and Science is by far the simplest preparation for life in the case of the vast majority of those aspiring to an University education. Vocational training should take its proper place in the educational system. But its proper place, so far as the majority is concerned, is before rather than after the University standard has been reached, in the schools and in the intermediate colleges which, in due course, I hope to see established. The function of the University in the matter of vocational education is to provide specialised courses for the training of experts and if disappointment is to be avoided it must be borne in mind that the openings for experts, except, in the case of medicine and engineering, are strictly limited. In the second place, I desire to see the whole system given a more specifically Indian orientation. A system that produced not Indians, but imitation Europeans, would stand self-condemned. I do not suggest that the existing system does that. How could I with the object-lesson before me, of the numbers of eminent Indians which it has produced? But I confess that in the past, at any rate, it may have had a tendency in that direction. The system of higher education has undoubtedly been too greatly divorced from the peculiar genius, the ancient tradition, the mode of thought and the daily lives of those whom it has sought to educate. It may be added that the recommendations of the Calcutta University Commission are in part designed to bring about changes in these two directions, viz., by developing vocational courses and by giving to the whole system a more specifically Indian orientation."

CHAPTER X.

Agriculture.

Scope of chapter.—This chapter deals with Agriculture, Co-operative Societies, Fisheries, the Veterinary Department and the department of Excise and Salt which were in the year 1921 transferred to the Minister for Agriculture and Public Works, The Hon'ble Nawab Syed Nawab Ali Chandhuri, under the reforms scheme. Before that Excise and Salt had been dealt with by the Finance Member of Council and the other subjects by the Revenue Member.

Agriculture.—In an important resolution which was issued in 1919 by Government on the policy of the Agricultural Department it was stated that they were aiming at the solution of two problems: the first was the provision of the best obtainable seed for any type of agricultural produce, and the second the creation of an agency for its distribution. The research work of the department, which includes the investigation of the best kind of seed, was conducted at the Dacca Agricultural Station, which is the headquarters of the chemical, botanical and other sections, whilst there is a smaller investigating centre in West Bengal at Chinsura. Unfortunately, though research work was carried on in the chemical section, the chemical expert was on deputation to the United Provinces for the greater part of the period; but the expert staff was strengthened in 1920 by the addition of a second economic botanist. Much activity was displayed in both the botanical and fibre sections under Messrs. Hector and Finlow, respectively. The discovery of the now well-known races of *Kakya Bombai* jute and *Indrasail* winter rice, belongs to the previous administration. These races are very popular and the cultivators appreciate the fact that they produce far more than the local varieties. But during the present period three other varieties of jute have been discovered which are better than *Kakya Bombai*. Two of these are called R-85 and D-154, which are strains of the *Kakya Bombai* race, but are immune from the disease of chlorosis and have proved slightly better yielders. The first is suitable to Eastern Bengal and the second to Northern Bengal; both are in demand. The third is Chinsura Green, which is suitable to Western Bengal and is popular on account of its exceptional yielding capacity. *Kakhtara*, a heavy yielding variety of autumn rice, belongs to the period, whilst investigations into various other kinds of rice were also made. A kind of sugarcane called the yellow tanna variety was found,

which stands out pre-eminently as the one best suited to the varying conditions of Bengal, and a definite stage was reached in the selection of the best *rabi* pulses and oilseeds. It may be added that a definite stage was also reached in the cattle-breeding operations at the Rangpur cattle farm, and that in 1921 the first batch of 12 half-bred Hissar bulls was sent out and stationed at various farms and veterinary dispensaries in North Bengal. On account of the public interest aroused in cotton by the high price of cloth, certain experiments were also made in cotton, but so far they do not indicate that this crop is suited to the climate of Bengal except in the Chittagong Hill Tracts. Moreover, a cotton survey has been started as a result of the recommendations of the Indian Cotton Committee. All this is representative of the very valuable work done in the research branch of the department. But it is not generally understood that this investigation and research requires great patience and systematic work over a number of years, and, for that reason, the department used to be the subject of much criticism from uninformed persons impatient for results.

Farms and seed distribution.—It is the policy of Government to establish a demonstration and seed farm in each district, at the rate of two or three a year, for the dual purpose of adjusting the results of scientific investigations at the central research stations to local conditions and of taking up the study of purely local problems. During the period they were being established at Barisal, Pabna, Suri, Bankura, Faridpur, Murshidabad, Jalpaiguri and Rangamati in the Chittagong Hill Tracts, whilst work was actually started on the farms at Barisal and Pabna. A private farm at Gosaba was handed over to the charge of the department by Sir Daniel Hamilton. Seed-stores were also established by Government at every district headquarters and in some subdivisions for the sale of approved seed and agricultural implements, it being left to private effort to establish seed-stores for smaller areas. In 1921, however, Mr. G. Evans, the Director of Agriculture, in view of the remarkable and expanding demand for departmental seed, drew up a scheme for utilising private agencies more extensively for the propagation and distribution of such seed. The central stations will supply seed to the district farms. These in turn will distribute it to private farms established through the agency of private proprietors, Government and Wards' estates and co-operative agricultural associations, where the seed will be propagated for a further period before distribution to the cultivators. Satisfactory progress has already been made in the working of these private farms, and the scheme seems to offer scope for future development.

Agricultural associations.—Probably the most striking development of the period in the direction of the creation of an agency for the distribution of the best obtainable seed was the inauguration, and the rapid increase in the numbers, of non-official agricultural societies limited to very small areas and composed of practical agriculturists really interested in local agricultural improvement. Lord Ronaldshay, though he did not actually inaugurate the system which started in the district of Birbhum on the lines of similar continental societies, did a great deal to foster the growth of such associations of which there are now over 300 in existence. The functions of such associations of agriculturists are to test and adjudicate on improvements suggested to them by the Agricultural Department, to discuss their successes and failures with each other and to bring their needs to the notice of the Agricultural Department; by this means the associations serve as a much needed link between Government and the people. In 1921 it was decided in the Ministry of Agriculture and Public Works that such societies should, in future, be organised as far as possible on a co-operative basis. They will therefore not only engage in such activities as the supply of seed and manure to members, but will also be in a position to undertake the more complicated form of agricultural improvement such as irrigation and drainage projects and the joint purchase and sale of agricultural machinery.

Staff.—The increasing activities of the department have naturally led to an increase in the executive staff. Whilst there were only two Deputy Directors in existence at the beginning of the period, posts for five such officers, one for each division, have now been sanctioned; a district agricultural officer was appointed in every district and some progress was made towards the appointment of a demonstrator in every thana in the province.

Agricultural education.—Agricultural education was also taken up during the period. Two agricultural vernacular schools were opened at Dacca and Chinsura, but in view of their costliness, they have been converted into secondary agricultural schools; and a scheme for a cheaper type of school for elementary agricultural education came under the consideration of Government. Meanwhile, in response to a popular demand for higher agricultural education at an institution belonging to the province, a scheme for the establishment of an agricultural institute at Dacca on the lines recommended by the Calcutta University Commission acting on the advice of Mr. S. Milligan, at that time the Director of Agriculture in Bengal, which would be devoted to the technical and practical training of persons who had

already received a good theoretical and scientific education, was sanctioned by Government. No work could, however, be started on the buildings for the institute owing to the financial stringency.

Sericulture.—As a result of the report on the silk industry in India by Mr. Lefroy, the sericultural branch of the agricultural department was entirely re-organized and placed under a Deputy Director of Sericulture with a view to counteract the diminution of silk production, to organize the branch properly and to co-ordinate its activities. A second Superintendent of Sericulture and a Sericultural Research expert were appointed. There was a marked disappearance during the period of the reluctance of the silkworm rearer to take Government seed, despite the fact that it is not yet entirely disease free ; and in the end the demand greatly exceeded the supply.

Water hyacinth.—That there has been a considerable extension of the water hyacinth within recent years in Bengal is a matter of common knowledge. This is a most dangerous pest which grows and extends extremely rapidly in wells, ponds, rivers, channels, and in fact wherever water is available ; it is a danger to both navigation and cultivation. The best methods of checking its spread were, therefore, under the consideration of the Agricultural Department. Successful experiments were made of its utility for the extraction of potash, and in 1921 Government appointed a committee of officials and non-officials under the chairmanship of Sir Jagadis Chandra Bose to consider the whole matter and make practical proposals for eradicating the pest.

Attitude of Lord Ronaldshay.—Lord Ronaldshay addressed several meetings connected with agriculture and in 1920 inaugurated the Board of the Bengal Agricultural Department, an official advisory body on agricultural problems peculiar to Bengal. In 1921 steps were taken to secure the representation of the non-official element on it. His Excellency took a keen interest in the department for he recognised that agriculture was an industry with which the lives of the vast majority of the people of Bengal were indissolubly bound up and therefore that the proper development of the department was a matter of considerable moment. He, therefore, lost no opportunity of pointing out what the department had done and of defending it against uninformed criticism. His view of the department may be gathered from his expression of opinion that the Minister, on whom the control of the department devolved in 1921, would have charge of a department which had achieved results of solid and permanent worth to the teeming cultivators of the soil, and an organization proved by experience to be best fitted to the requirements of Bengal and capable of steady expansion as time and circumstances might demand.

Co-operative societies.—Lord Ronaldshay also attached immense importance to the co-operative movement because it was capable of playing an important part in the broad scheme of policy which he had adopted as the guiding principle of his administration, and which he concisely summed up, when addressing the Provincial Co-operative Conference held in 1918, in one phrase as the promotion of the welfare of the people. In every direction a remarkable development took place in the period; in the expansion of the number of societies and members; in the extension of the movement in response to the industrial awakening from credit to non-credit and non-agricultural societies; in the detailed technique of the working of the department; in the interest taken by the general public in the movement and in the moral, economic and social progress of the people affected by it. On the 30th June 1917 there were 3,086 societies with a membership of nearly 150,000 and a working capital of over 151 lakhs, whilst on the 30th June 1921 the number of societies had increased by more than double to 6,366 with a membership of nearly 250,000 and a working capital of over 333 lakhs. This is a notable advance and it is not by any means merely an advance on paper.

Mr. J. T. Donovan, I.C.S., was in charge of the department as Registrar for the greater part of the period and he has been congratulated by Government for the great stride the movement made during his tenure of office.

Types of new societies.—One of the most important societies formed in the period was the Provincial Bank, or more correctly, the Provincial Co-operative Federation, Limited, which was formed in 1918 with the objects of keeping the money of its affiliated societies employed all the year round by the utilisation of their surplus and of assisting its members, who are central banks and other societies, in other ways. These objects have been achieved. It has followed a careful and cautious policy and this has enabled it to retain the confidence of the depositors; in the year ending the 30th June 1921 no less than five lakhs of rupees were received in deposits from the public, though its rates are sometimes less and never more than the rates offered by Government and public bodies.

One of the most successful societies was the Naogaon *Ganja* Cultivators' Co-operative Society, Limited, in the district of Rajshahi, which was floated in 1917. The object of this society was to eliminate the middlemen between Government and the *ganja* cultivators, so that the profits made by the former should go to the latter. Government granted to the society the monopoly of trading in *ganja* and *bhang*.

Its activities have been extended in the direction of a large co-operative store, a printing press, the erection of a new dispensary, a demonstration farm, the erection of schools, the relief of distress, and town improvement. In fact, it makes a bid on the ground of efficiency and financial stability to monopolise the local self-government of the *ganja* mahals. It has certainly opened up a new era of prosperity for the *ganja* cultivators of Naogun; in its first year it made a profit of over five lakhs of rupees. In 1921, however, it passed through a severe crisis owing to an attempt to spread the non-co-operation movement in the area. This failed, but internal dissension, for which the agitators were to some extent responsible, considerably hampered the development of its work. There is now, however, every reason to believe that the society will continue its former prosperous career.

The next society which deserves mention is the agricultural supply and sale society of the colonists of Khepnpara in the district of Bakarganj. Their dealings in rice have been so successful that they built a granary for storing rice which they had hitherto been forced to sell at a sacrifice for want of storage room; they also decided to purchase machinery for husking purposes.

During the period, in particular in the years 1920 and 1921, there was a marked increase owing to the prevalent high prices in the number of co-operative stores for the purchase and sale of general necessities. They came into existence with the sole idea of underselling traders who were believed to be profiteering. Unfortunately, however, they were organised by men with little or no business experience and, therefore, owing to bad management, etc., out of more than one hundred of such societies not more than ten were successful and not more than four justified their existence. As an example of such a successful society the Hurirhat co-operative village store may be mentioned. This exercised an important influence on prices in the neighbouring markets where it opened stalls.

Amongst industrial societies the most important was the Bankura Industrial Co-operative Union which was established originally in the year 1918 and which was used with advantage to afford relief by giving employment to weavers during the famine in Bankura in 1919. Government gave a guarantee of a quarter of a lakh of rupees, but the guarantee was not drawn upon. On the contrary a profit was made and 500 families of weavers were kept off the relief works. By this means a considerable stimulus was given to the weaving industry in the district of Bankura, and, incidentally, better cloth is

now woven than the weavers could have attempted to make two or three years ago.

To complete the description it is necessary to mention the milk societies near Calcutta, which however suffered an eclipse temporarily; the successful Calcutta Credit Societies, which afford great assistance to middle-class employees in Calcutta offices, and the formation of irrigation and anti-malarial societies. For a time a special officer was appointed to deal with industrial societies. The department was not however content with its mere expansion, but it proceeded to put its house in order by the adoption of many of the recommendations of the Committee on Co-operation in India, the initiation of a sound system of audit by a special agency and the elimination of societies which were thoroughly unsound and a danger to the movement. Steps were taken to liquidate such societies, and the Public Demands Recovery Act was amended by the Bengal Public Demands Recovery (Amendment), Act, 1918 (B. C. I of 1918), so as to facilitate their liquidation, a somewhat slow process under the ordinary law. The rules under the Co-operative Societies Act II of 1912 were also revised and elaborated.

The Bengal Co-operative Organization Society.—One important feature of the period was the increasing interest taken by the public in the movement, in particular by the zamindars; and the annual departmental co-operative conferences always aroused a good deal of interest. In this respect the most notable private enterprise of the period was the formation of the Bengal Co-operative Organization Society, which attracted to itself representative men from the land-owning, mercantile and commercial classes. Its main object is to develop general interest in co-operation; it is a central bureau of information and advice on matters of co-operation; it has a library, gives lectures and publishes *The Bengal, Bihar and Orissa Co-operative Journal* and the *Bhandar*, a monthly Bengali journal.

Social, moral and economic effects of the movement.—There were many instances of the excellent social, moral and economic effects of the movement during the period. The case of the Naogaon *Ganja* Society has already been mentioned; and the economic effects in the case of other societies can be readily understood. One group of societies maintain that they have not only reduced the rate of interest normally charged in the area for themselves, but also for other residents in it. The members of another society pledged themselves to abstain from drink and requested the Magistrate to remove the

local drink shop. In another case the members pledged themselves not to insist upon a fellow-villager giving a ceremonial feast, and so forth.

Control and staff.—The remarkable activity of the Department of Co-operative Societies involved an expansion of its staff. The permanent retention of the Registrar, as head of the department, was recognised by the Secretary of State as a necessity; whilst a Deputy Registrar was also sanctioned. In addition the posts of five Deputy Collectors designated Assistant Registrars, one to supervise the work of each division, were sanctioned: four have been appointed, the fifth will be appointed when funds were available; and the number of auditors and inspectors were increased annually. At the close of the period the question of putting the whole department on a permanent footing was under consideration. In 1922 Rai Jamini Mohan Mitra Bahadur, a member of the Provincial Executive Service, was appointed to be Registrar for the second time.

Fisheries.—The work done by the Fisheries Department during the period suffers severely in comparison with the work done by the Agricultural Department and the Department of Co-operative Societies. The department was, however, only started as a branch of the Agricultural Department in 1911 and inaugurated as a separate department in May 1917; and it is at present at the stage of experiment and research, which, just as in the case of agriculture, requires great patience and systematic work covering a number of years. For this reason visible results of any consequence have not yet been attained and, consequently, the Fisheries Department was the butt of much criticism during the period. The department was also seriously handicapped by the loss of the whole of its superior permanent staff in the year 1919-20 by the retirement of Mr. Southwell, the Director of Fisheries, who was on leave, the resignation of the Superintendent of Fisheries, who acted for him, and the death of the other Superintendent of Fisheries. Pending the appointment of a Director of Fisheries, whose services it is difficult to procure, the department has been temporarily placed under the Director of Agriculture again. So far certain definite results have been attained in carp-cultural experiments; carp have been found to breed in confined waters under certain special conditions and an artificial method of fertilisation of the eggs has been discovered. In 1919 an experiment was started on a small scale of the appointment of district fishery officers with a view to decentralise the work and to bring the department in closer touch with organized private enterprise. They were mainly employed

in making a survey of fisheries and in the introduction of co-operative societies amongst fishermen. On the 1st April 1921 the arrangement for the joint control of the Fisheries Department for the provinces of Bengal and Bihar and Orissa was stopped.

Veterinary Department.—The Veterinary Department continued to make quiet but steady progress during the quinquennium. The number of veterinary assistants employed in the districts, who are paid partly from local and partly from Government funds, rose from 92 at the commencement of the period to 111 on the 31st March 1921, the number of veterinary dispensaries or hospitals from 25 to 37 in the same period and the number of stud bulls kept by Government and local bodies from 71 to 132. As an example of the good work done by the veterinary assistants it is noticeable that nearly 90,000 animals were inoculated in the year ending on the 31st March 1921 against rinderpest, hæmorrhagic septicæmia and anthrax, and that the death-rate amongst the inoculated was only slightly in excess of one per cent. There was a large increase in the annual number of inoculations during the period. The pay of veterinary assistants was increased in order to offer sufficient attractions to students with a general education, whilst that of the Deputy Superintendents was also increased on the recommendation of the Public Services Commission so as to be on a par with the increased pay in the Agricultural Department. The Civil Veterinary Department is not, however, now under the Agricultural Department. It was put directly under Government in the year 1920 with the senior veterinary officer in the province, Colonel Smith, the Principal of the Bengal Veterinary College, as the head of the department with the designation of "Veterinary Adviser to the Government of Bengal." Useful work was done by the Bengal Veterinary College, which was visited more than once by Lord Ronaldshay; and practically all the Bengal graduates from it have received employment as veterinary assistants in the province. The staff of the college was augmented by the appointment of a second Imperial officer, and that of the Civil Veterinary Department by the appointment of a second Deputy Superintendent for the Eastern Bengal divisions, both in the year 1920.

Excise.—The most important administrative change relating to excise which was effected during the period was the gradual introduction of the "Bengal Fixed-fee" system of assessing excise and opium shops throughout the province instead of the method of settling them by auction, which had been in vogue for about fifty years. The selection of sites for these shops now rests with the Collectors assisted

by advisory committees outside Calcutta and with licensing boards for the municipalities situated within the Calcutta area. The new system provides that the monthly assessment of the shops is adjusted automatically on the basis of the issues in the preceding month. The prices of intoxicating articles are also fixed and duties are automatically regulated in proportion to those prices. Government are thus able to exercise a better control on the consumption of intoxicating articles and are also able to regulate prices with reference to consumption in pursuance of the policy of securing a minimum of consumption with a maximum of revenue. The revenue rose from over 1½ crores in 1916-17 to nearly two crores in 1920-21, i.e., by nearly 36 per cent., but the consumption of country spirit increased by only 22 per cent. whilst that of opium and *ganju* decreased. This increase in the consumption of country spirit was, however, exactly wiped out during the months of April to December 1921 by the imposition of an increase in excise taxation and in the retail prices of country spirit, but this was unaccompanied by any correspondingly large decrease (which only amounted to 7 per cent.) of revenue. The picketing of liquor shops by non-co-operators was also responsible, to some extent, for a decrease in consumption. In the same year Mr. Johnson, the well-known American prohibitionist, visited Calcutta and Darjeeling, where his visit attracted much attention and several prohibition meetings were held. Previously however to his visit a resolution recommending total prohibition had been moved and lost in the Legislative Council, though steps were taken to secure a further diminution of consumption by closing several shops and raising duties and prices. It was impossible to go any further.

Facilities were given for the use of alcohol for industrial purposes, specially for the manufacture of medicines, with the result that they competed successfully with medicines imported from Germany.

Salt.—At the commencement of the period abnormal conditions prevailed in the salt market, and a situation arose which necessitated the intervention of Government and the limiting of prices under the Defence of India (Consolidation) Rules. A fall in the amount of the stocks at the warehouses led to a fear that there would be a shortage of stocks, and the demand became so considerable that prices rose rapidly from the middle of October 1917, culminating in a very high figure at the end of November 1917. High retail prices as a consequence prevailed throughout the province and were in part responsible for an epidemic of looting of markets and bazaars. Government accordingly stepped in and made arrangements to ensure ample supplies

of salt and to fix maximum prices for its wholesale and retail price. The abundance of supply so caused led to a fall in prices below the maximum fixed by Government in March 1918. The price continued to fall until the maximum rate was reduced; finally, all restrictions on the prices were withdrawn on the 1st December 1920. The situation in 1917 naturally excited considerable interest and the possibility of the local manufacture of salt in Bengal was discussed in the Legislative Council. Though the reasons for the onsting of indigenious salt by the imported article were practically incontrovertible and were still operative as against the likelihood of any re-establishment of the local industry, Government decided that they would consider any practical proposition for the local manufacture of salt. The manufacture of salt was accordingly permitted in a few districts and a license was given to a company to manufacture salt, but these measures have proved ineffective.

CHAPTER XI.

Public Works and Irrigation.

Changes in the Public Works Department.—The appointment of a second Chief Engineer (Irrigation) for the province was originally sanctioned in 1913, as a temporary measure, for five years on account of the large increase of work in the Public Works Department. This department is divided into two main branches, the Roads and Buildings branch (including Railways) and the Irrigation branch, of which the two Chief Engineers are *ex-officio* Secretaries to Government. Though subsequently every effort was made to decrease work or delegate duties, their effect was more than counter-balanced by the development of important irrigation, drainage and canal schemes. The post of Chief Engineer of the Irrigation branch was therefore retained and, finally, made permanent. This made the separation of the Roads and Buildings branch from the Irrigation branch for the purposes of the reforms scheme, according to which the former branch is "transferred" and the latter "reserved," a comparatively simple matter; and a complete division of the whole department was effected, so far as funds permitted from the 1st December 1921. Before the introduction of the reforms scheme of Government both branches had been in the charge of the Revenue Member of Council, but afterwards the Maharajahdiraja Bahadur of Burdwan took charge of Irrigation and the Hon'ble Nawab Syed Nawab Ali Chaudhri of Public Works. For the greater part of the period Messrs. C. P. Walsh and F. A. A. Cowley, C.I.E., were the Chief Engineers in charge of Roads (and Buildings) and Irrigation, respectively. Mr. Cowley died in harness in 1921. The re-organization of the different services which constitute the department consequent upon the recommendations of the Public Services Commission gave rise to some difficulty, but eventually three services were constituted, viz., the Indian Service of Engineers, the Bengal Engineering Service and the Subordinate Engineering Service; while the Secretary of State decided that for specialist appointments specialist services should be constituted under the three main heads, architectural, sanitary and electrical, on a provincial basis. It may, however, be remarked that the Electric Inspector was transferred in 1920 to the control of the Director of Industries, in so far as his duties under the Electricity Act (IX of

1920) are concerned, whilst the Sanitary Engineer is now Chief Engineer of the Public Health Department and is under the control of that department. In 1921 the Government of India recommended to the local Government the policy of transferring public works, excluding irrigation, to local bodies. This important measure was under consideration at the end of the period.

Roads.—The question of communications in Darjeeling and the Western Duars attracted attention during the period; and Sir John Cumming, then the Member in charge, drew up in 1919 a complete scheme for the development of communications in the Western Duars. It was contingent for its full development on contributions from the tea-planting interests for the construction of certain of the roads which benefit that industry; and, in the absence of such contributions, the scheme is only partially being given effect to. The improvement of communications in the Darjeeling district was brought by the tea industry to the notice of His Excellency who was able to effect some improvement, though the financial position and the inability of the industry to make any contributions precluded the undertaking of any large project. The large majority of the roads in the province are under the control of district boards or municipalities.

Buildings.—The more important buildings, such as the Hospital for Tropical Diseases, which were finished during the period, are already mentioned in their proper place in this review; otherwise the works carried out were of a general character such as the erection, enlargement and maintenance of public offices, hospitals, education buildings, police-stations, and so forth. It will suffice to note here that the period was one of considerable activity in building construction, even though individual departments were inclined to consider themselves starved in this respect; and that the proposed but ultimately postponed partition of the districts of Midnapore and Mymensingh led to the temporary formation of two public works divisions to deal with the large amount of building construction involved.

Railways.—With the exception of a few light railways, all the important railways in Bengal are under the control of the Government of India. The principal extension was the net-work of railways connecting up Mymensingh with Netrakona, Keshoreganj and Bhairab Bazar; they were opened in 1917 and 1918. Amongst smaller railways the completion of the Kalighat-Falta and Khulna-Bagerhat lines in 1917 and 1918, respectively, may be mentioned. Public interest was

evinced in the problem of devising railway communication between Calcutta and Eastern Bengal, so as to avoid the inland steamer journey to Dacca on the one hand, or to Barisal on the other. The problem is, however, fraught with considerable difficulties owing to the fact that the railways would cross important drainage lines of the country or traverse shifting rivers or the probability that the necessary railway embankment might cause an alteration in the natural drainage and subsequently in the sanitary condition of the area. On account of similar difficulties the Faridpur-Jessore railway scheme was abandoned, but a reconnaissance survey was made of the Faridpur-Barisal route. A Committee was also appointed in 1920 to advise on the feasibility of a railway in the tract of country lying between the Padma and Dhaleswari rivers in order to shorten the journey from Goalundo to Dacca. At the end of the period the report of the Committee, which recommended a certain line as suitable, was under consideration. One of the matters to which Lord Ronaldshay directed his attention was the safety of the public on the highway along which the Darjeeling-Himalayan Railway, which is subject to a measure of control by this Government, is constructed; and he succeeded in getting a number of dangerous level crossings on that road eliminated. It is interesting to record that in the year 1921 an expert visited Calcutta to collect information for a report on the practicability of tube railways for Calcutta in accordance with the recommendation of a Committee appointed to consider the problem of rapid transportation in and round about Calcutta.

Bengal Aerial Ropeways Bill.—The Bengal Aerial Ropeways Bill to facilitate the construction of aerial ropeways intended for the public carriage of goods and passengers and to provide for adequate administrative control over the construction and working of the same was introduced in the Legislative Council in 1921, but it was withdrawn in 1922 for revision in the light of the knowledge regarding private ropeways required in Bengal in connection with the working of collieries, which became evident on the publication of the draft bill.

Erosion of Rampur-Boalia, Pabna and Noakhali.—There was considerable anxiety during the period as to the fate of the three towns and district headquarters of Rampur-Boalia, Pabna and Noakhali which were threatened by erosion. The measures which were taken in the case of Rampur-Boalia saved the district jail and the town from erosion by the river Ganges, but a considerable area south of the town of Pabna was washed away by that river despite the precautions taken by the Public Works Department to prevent it. The

coast line of the district of Noakhali in the neighbourhood of the town of Noakhali has for some years been subjected to encroachment by the waters of the Bay of Bengal and at the end of the period, it was decided that the town could no longer be considered free from the danger of destruction in the near future. The question of a site for a new headquarters of the district was therefore taken into consideration.

The Grand Trunk Canal.—Probably the most important work undertaken by the Irrigation Department was the preparation and execution of the anti-malarial schemes which have been referred to elsewhere in connection with the anti-malarial campaign of Lord Ronakishay. It was, however, concerned with other important projects. The Madaripur Bil water-route, by which direct communication was obtained between Madaripur and other jute centres and the terminus of the Eastern Bengal Railway at Khulna, was for all practical purposes completed at the end of the previous administration. During the present administration the Grand Trunk Canal scheme for making the route between Calcutta and those centres still shorter was finally framed by Mr. C. Addams-Williams, C.I.E., and was eventually sanctioned by the Secretary of State in 1920. It had been under consideration for some twenty years. This canal will connect Calcutta with the main river system of Eastern Bengal and though it will only be 22½ miles long, it will shorten the important inland steamer route from Calcutta to the great jute and rice centres by 120 miles. A long inland harbour with railway and warehouse facilities will be constructed at Maniktola which should do much to relieve the congestion on the Hooghly by permitting vessels to turn without entering that river. The harbour and its connected basins will provide a wide frontage of nearly 14 miles and it seems inevitable that with these facilities a new industrial centre will be created in the neighbourhood. Incidentally the construction of the canal will afford the means of reclaiming a large water-logged area in the near vicinity of Calcutta, thus improving the sanitary condition generally, whilst affording an avenue for the expansion of the city towards the east. The canal is admitted on all sides to be essential for the adequate development of the natural waterways of the Ganges delta in which Bengal possesses one of the finest systems of waterways in the world. In 1920 active steps were taken to commence the work by acquiring the necessary land and ordering the necessary dredgers, but in 1921 the adverse financial position of the province made a postponement necessary pending a further examination into the productive aspects of the scheme. In 1920 it had been estimated to

cost slightly over three crores; and it had been anticipated that a return of 6·7 per cent. would be obtained.

Damodar project.—The Grand Trunk Canal is primarily a navigation project, but another large project, viz., that of the Damodar canal in the district of Burdwan was also being investigated as an irrigation project, and in 1921 it received the sanction of the Secretary of State at an estimated cost of 70 lakhs. The project has in view the objects of ensuring a supply of water to the existing Eden Canal and of irrigating a tract of country in the district of Burdwan, in which agricultural operations are at present precarious owing to the irregularly distributed rainfall. The scheme provides for the construction of an aqueduct across the river Damodar at Fakirbora about 28 miles above Burdwan, a main canal 28 miles in length and one main branch. Altogether it is anticipated that the project will irrigate over 300 square miles; and it will in addition improve the sanitary conditions of a large area in the Burdwan and Hooghly districts.

Waterways Advisory Committee.—A Waterways Committee has been in existence since the year 1906 to inspect periodically the natural and artificial waterways between Calcutta and Eastern Bengal and to suggest measures of improvement. It subsequently suffered several changes and in 1918 the joint steamer companies of Calcutta (the India General Navigation and Railway Company and the Rivers Steam Navigation Company), who however wanted a Trust, urged the necessity of greater centralized control in order to insure greater co-ordination in the matter of river conservancy between the various local Governments concerned. It was therefore decided in 1920 that the sphere of the existing Waterways Advisory Committee should be enlarged by making it possible to have extra representation for the provinces of Bihar and Orissa and Assam. The Member in charge of Irrigation is the President, and railway, steamer and commercial interests are also represented on the Committee. It was also decided that their functions should be to advise on firstly, the maintenance and improvements of waterways, more specially the Ganges, Brahmaputra and Meghna group of waterways which connect Bengal with Bihar and Orissa on the one hand and with Assam on the other; and, secondly, the regulation of traffic on these waterways.

Upper Hooghly river and its feeders—Nadia rivers.—Towards the end of the previous administration Major F. C. Hirst, I.A., Director of Surveys, Bengal, had submitted a report on the condition of the Upper

Hooghly river and its feeders. On this Government appointed a Committee consisting of practical men with special knowledge of the waterways of the province to report upon the steps which should be taken to carry out systematic observations of the changes in these rivers, and also, if possible, to improve their condition as navigable channels and as feeders for the Lower Hooghly. In 1920 Government accepted their main recommendation and appointed a permanent Board under the chairmanship of the Chief Engineer, Irrigation Department, to examine all important projects concerning either drainage, irrigation, sanitation or transport which are likely to restrict the free flow of flood water. Meanwhile contour surveys of the connected areas were undertaken. The Board comprised, besides the chairman and two other officials, Sir Alexander (then Mr.) Murray, who was then President of the Bengal Chamber of Commerce and had been nominated by that body, and a representative of the joint steamer companies. In this connection it may be of interest to those who are alarmed by the possibility of the Ganges sweeping down the river Hooghly through the Bhagirathi, as the Hooghly is called in its upper reaches, and wiping the city of Calcutta off the map, to learn that, on the contrary, bandelling and dredging operations had to be undertaken to induce the Ganges to send as large a supply of water as possible down the Bhagirathi.

Kidderpore bridge.—In 1918 a Committee which had been appointed to examine the Kidderpore bridge over the Tolly's Nala in Calcutta reported that it had deteriorated so greatly owing to the congestion of traffic on it and its approaches as to make it unsafe for use. Therefore, from September 1918, all heavy vehicular traffic, including tram cars, was stopped. A new bridge is under construction.

Other activities of the Irrigation Department.—The above description, however, does not complete the tale of the multifarious duties and work of the Irrigation Department. The canals and embankments in Midnapore and in the central portion of the province contribute a large amount of work; means were investigated for the prevention of the recurring floods of the Damodar river regarding which Lord Ronaldshay made an interesting speech in 1918; the principles to be observed in determining the headway and waterway to be provided under railway bridges over navigable channels were settled; the question of the improvement and sanitation of Tolly's Nala was taken up and the work proceeded with; an investigation was made of the drainage conditions of the area lying between the Dhaleswari and the Padma rivers in order to discover means of improving the sanitation of the area between the rivers and to improve the facilities for navigation; bandelling operations were

conducted in the channel of the river Ganges at Rampur-Boalia in order to improve navigation and sanitary conditions and to maintain the water-supply of the town. Bandelling was also undertaken on the Ganges between Rajmahal and Goalundo so as to maintain a navigable channel with 6 feet depth of water throughout the Ganges; investigations were made into the suitability of the Bidyadhari river as an outfall for Calcutta drainage; enquiries were made into the measures necessary for protecting certain areas from flood; a hydro-electric survey was undertaken, and so forth.

CHAPTER XII.

Summary.

It is now possible to tabulate the principal achievements of the period. The more important are probably the following in the order in which they have been dealt with—

- (1) the inauguration of a reformed scheme of Government embodying a substantial instalment of responsible Government;
- (2) the extermination of a dangerous anarchical movement by means of the Defence of India Act, and the skilful administration of that Act;
- (3) the measures taken to deal with the non-co-operators;
- (4) the provision of men, money and material for the prosecution of the war;
- (5) the revision of the system of administration in the district of the Chittagong Hill Tracts;
- (6) the extension of the system of trial by jury to all except the backward or non-regulation districts of the province;
- (7) the administration of famine relief or relief of distress caused by the cyclone of 1919 or otherwise;
- (8) the treatment of the financial position in which Government were placed on account of the reforms scheme of Government;
- (9) the re-organization of all services and establishments;
- (10) the creation of a new department of Industries;
- (11) the release from official tutelage of the larger local authorities;
- (12) the investment of village authorities with a generous measure of local self-government and the creation of a link between them and Government;
- (13) the inauguration of, and an advance in, an anti-malarial campaign;
- (14) the creation of the department of Public Health;
- (15) the opening of new medical schools, *i.e.*, the School of Tropical Medicine and Hygiene in Calcutta and the Ronaldshay Medical School at Burdwan;

- (16) the opening of a new University at Dacca ;
- (17) the discoveries made in, and the expansion of, the Agricultural Department ;
- (18) the organization of the sericultural branch of the Agricultural Department ;
- (19) the marked advance made by the co-operative movement ; and,
- (20) the administration of the Excise Department on a new system.

Amongst other items may be mentioned the Grand Trunk Canal scheme which was sanctioned, but which was unavoidably postponed on account of the financial condition of the province ; the project for the Howrah bridge which has now reached a definite stage ; the scheme for the development of Kalimpong as a hill station, which has also reached a definite stage in that the scheme for the water-supply has been completed ; and the encouragement given to the Indian fine arts. Finally, the legislation which was undertaken must be noticed (Appendix III).

On the debit side of the account must be included the non-co-operation movement, the growth of labour strikes on frivolous or political grounds and the depreciation in the value of money. But the Government of Bengal cannot be held responsible for these unpleasant all-India or world-wide features any more than they can for, on the one hand, the cyclone which traversed the province or for, on the other hand, the prosperity of trade caused by the war and the industrial awakening of the province. In the case of the cyclone they could only alleviate its effects as they did, and in the case of industries provide facilities for their development by the creation of a special department.

APPENDIX I.

Members of the Executive Council, 1917-20	Date.
The Hon'ble Mr. P. C. Lyon, C.S.I., I.C.S.	Till 9th April 1917.
The Hon'ble Sir Henry Wheeler, K.C.S.I., K.C.I.E., I.C.S. ..	From 9th April 1917.
The Hon'ble Sir N. D. Beeson-Bell, K.C.S.I., K.C.I.E., I.C.S. ..	Till 29th March 1918
The Hon'ble Sir J. G. Cumming, K.C.I.E., C.S.I., I.C.S. ...	From 29th March 1918 to 7th May 1920.
The Hon'ble Sir Charles James Stevenson-Moore, K.C.I.E., C.V.O., I.C.S.	From 7th May 1920 to 2nd January 1921.
The Hon'ble Nawab Sir Syed Shams-ul-Huda, K.C.I.E.	.. Till 8th June 1917
The Right Hon'ble Lord Sinha of Rupn, K.C.I.E., P.L.	.. From 8th June 1917 to 13th May 1918 and from the 4th Novem- ber 1918 to 16th November 1918.
The Hon'ble Sir Bijay Chand Mahatab, K.C.S.I., K.C.I.E., I.O.M., Maharajadhiraja Bahadur of Burdwan.	From 14th May 1918 to 3rd November 1918 and from 16th Novem- ber 1918.

Members of the Executive Council, 1921-22.

The Hon'ble Sir Henry Wheeler, K.C.S.I., K.C.I.E., I.C.S. ...	3rd January 1921
The Hon'ble Sir Bijay Chand Mahab, K.C.S.I., K.C.I.E., I.O.M., Maharajadhiraja Bahadur of Burdwan.	Ditto
The Hon'ble Sir (Then Mr.) John Henry Kerr, C.I.E., C.S.I., I.C.S.	Ditto
The Hon'ble Sir Abd-ur-rahim, K.I.	Ditto

Ministers, 1921-22.

The Hon'ble Sir Surendra Nath Banerjya, K.T.	3rd January 1921
The Hon'ble Mr. Provas Chandra Mitter, C.I.E.	Ditto
The Hon'ble Nawab Syed Nawab Ali Chaudhuri, Khan Bahadur, C.I.E.	Ditto

APPENDIX II.

Allotment of business of the reserved and transferred departments.

Members.		Portfolio.	
The Hon'ble Sir Henry Wheeler	..	1. Appointment ...	}
		2. Political ...	
		3. Police ...	
		4. Ecclesiastical ...	
		5. European Education.	
The Hon'ble Maharajadhiraja Bahadur of Bmdwan.	of	1. Land Revenue ...	}
		2. Land Acquisition	
		3. Forests ...	
		4. Irrigation ...	
		5. Excluded areas ...	
The Hon'ble Mr. J. H. Kerr	...	1. Finance ...	}
		2. Separate Revenue	
		3. Commerce and reserved Industrial subjects.	
		4. Marine ...	
		5. Jurisdiction ...	
The Hon'ble Sir Abd-ur-rahim	...	1. Judicial ...	}
		2. Jails ...	
		3. Emigration ...	
		4. Immigration ...	
		5. Jurisdiction ...	
Reservoi.			
Ministers.			
The Hon'ble Sir Surendra Nath Banerjee	...	Local Self-Government and Public Health. ¹	} Transferred
The Hon'ble Mr. Provash Chandra Mitter	...	Education ²	
The Hon'ble Nawab Syed Nawab Ali Chaudhuri	...	Agriculture and Public Works. ³	

¹ Includes Medical Administration.² Includes Registration.³ Includes Civil Veterinary Department, Fisheries, Co-operative Societies, Excise, Development of Industries and Industrial Research and Technical Education.

APPENDIX III.

Acts passed by the Legislative Council during the period.

	PAGE.
1. The Calcutta Municipal (Amendment) Act, 1917 (Ben. Act I of 1917)	79
2. The Bengal Public Demands Recovery (Amendment) Act, 1918 (Ben. Act I of 1918)	100
3. The Bengal Tenancy (Amendment) Act, 1918 (Ben. Act II of 1918)	12
4. The Bengal (Aliens) Disqualification Act, 1918 (Ben. Act III of 1918)	24
5. The Serampore College Act, 1918 (Ben. Act IV of 1918)	86
6. The Chittagong Port (Amendment) Act, 1918 (Ben. Act V of 1918)	57
7. The Calcutta Hackney-carriage Act, 1919 (Ben. Act I of 1919)	70
8. The Bengal Juvenile Smoking Act, 1919 (Ben. Act II of 1919)	40
9. The Bengal Tenancy (Amendment) Act, 1919 (Ben. Act III of 1919)	43
10. The Bengal Primary Education Act, 1919 (Ben. Act IV of 1919)	87
11. The Bengal Village Self-Government Act, 1919 (Ben. Act V of 1919)	67
12. The Bengal Food Adulteration Act, 1919 (Ben. Act VI of 1919)	79
13. The Calcutta and Suburban Police (Amendment) Act, 1919 (Ben. Act VII of 1919)	31
14. The Bengal Cruelty to Animals Act, 1920 (Ben. Act I of 1920)	70
15. The Eastern Frontier Rifles (Bengal Battalion) Act, 1920 (Ben. Act II of 1920)	33
16. The Calcutta Rent Act, 1920 (Ben. Act III of 1920)	73
17. The Calcutta Pilots (Amendment) Act, 1920 (Ben. Act IV of 1920)	56
18. The Bengal Alluvial Lands Act, 1920 (Ben. Act V of 1920)	43
19. The Bengal Agricultural and Sanitary Improvement Act, 1920 (Ben. Act VI of 1920)	41
20. The Calcutta Port (Amendment) Act, 1920 (Ben. Act VII of 1920)	55
21. The Indian Red-cross Society (Bengal Branch) Act, 1920 (Ben. Act VIII of 1920)	29
22. The Deputy President's Emoluments Act, 1921 (Ben. Act I of 1921)	5
23. The Bengal Land Registration (Amendment) Act, 1921 (Ben. Act II of 1921)	44
24. The Bengal Primary Education (Amendment) Act, 1921 (Ben. Act III of 1921)	87
25. The Calcutta Improvement (Amendment) Act, 1922 (Ben. Act I of 1922)	72
26. The Bengal Children Act, 1922 (Ben. Act II of 1922)	35
27. The Bengal Stamp (Amendment) Act, 1922 (Ben. Act III of 1922)	50
28. The Bengal Court-fees (Amendment) Act, 1922 (Ben. Act IV of 1922)	50
29. The Bengal Amusements Tax Act, 1922 (Ben. Act V of 1922)	50

APPENDIX IV.

STATEMENT I.

A list of War Funds and Institutions to which contributions have been made by the people of Bengal.

Serial No.	NAME OF FUND OR INSTITUTION.	Amount contributed.	Object of Fund or Institution.
		Rs.	
1	The Imperial Indian Relief Fund (Bengal Branch)	15,08,602	To afford relief to all classes in India suffering from the effects of the war.
2	The Lady Carmichael's Bengal Women's War Fund.	24,56,350	Started in August 1914 by Lady Carmichael and a number of European and Indian ladies. Did "Red-cross" work and made up units according to the St John Ambulance Scheme. Later developed a highly efficient system for the supply of comforts to the Indian Relief Fund in the East and to the Navy.
3	The Armenian Relief Fund	1,12,251	To afford relief to Armenians suffering from the effects of the war and particularly to help homeless Armenian refugees in Trans-Caucasia.
4	The Belgian Relief Fund	4,17,851	To afford succour to Belgians rendered homeless or destitute by the war.
5	The Belgian Children's Relief Fund	46,786	To afford relief to Belgian children affected by the war.
6	The French Red-cross Fund.	56,299	To assist the work of the French Red-cross Association.
7	The Lady Burghelers's Prisoners' Fund.	1,30,790	To provide food and comforts to prisoners of war.
8	The Scottish Women's Hospital Fund.	2,78,573	To assist the Scottish Women's Hospital Fund in their Red-cross work at Salonika.

Serial No	NAME OF FUND OR INSTITUTION.	Amount contributed.	Object of Fund or Institution.
		Rs.	
9	The <i>Statesman</i> Calcutta War Fund	6,83,408	Inaugurated through the columns of the <i>Statesman</i> newspaper and administered by the Calcutta War Fund Committee. Provided a convoy of 50 motor ambulances with attendant motor-cars and motor cycles, and paid for their up-keep for one year in France.
10	The Lord Roberts Memorial Workshops Fund.	20,825 ¹	To raise a memorial to the late Field Marshal by establishing workshops for the employment of disabled soldiers and sailors.
11	The Bengali Regiment Patriotic Fund.	1,13,559	To provide comforts for members of the Bengali Regiment (49th 'Bengalis'), and to help the families of those who went on active service.
12	The Bengali Double Company Fund.	20,591	Ditto ditto.
13	The Bengali Double Company Ladies Fund.	19,672	Ditto ditto.
14	The King George's Fund for Sailors.	3,11,657	To aid Marine Benevolent Institutions and to perpetuate a lasting recognition of the Imperial services rendered by the seamen.
15	The "Our Day" Fund (Bengal Branch).	15,99,614 ²	To provide funds to meet the needs of the British Red-cross Society and the St. John Ambulance Association in India and Mesopotamia.
16	The Viscount Davenport's Seamen's Hospital Fund, Greenwich.	4,175	To assist Viscount Davenport's Seamen's Hospital at Greenwich.
17	The Army Young Men's Christian Association Fund.	3,00,000 ³	To provide restaurants and rest-houses for British troops and to supply them with indoor and outdoor amusements.
18	The Red Triangle Campaign, Calcutta.	1,87,086	Inaugurated in April 1918 as a special effort on behalf of the general work of the Army Young Men's Christian Association.

¹ The amount collected between 1st January 1919 and April 1919 is Rs. 14,304.

² The amount collected between 1st January 1919 and 30th June 1919 is Rs. 5,55,164.

³ Up to 30th September 1918. Subsequent figures not yet available.

Serial No.	NAME OF FUND OR INSTITUTION.	Amount contributed.	Object of Fund or Institution.
		Rs.	
19	The Lady Lansdowne's Officers' Wives and Families Fund	3,02,688	To afford financial and other assistance to the wives and families of officers who have fallen in the war.
20	The St. Dunstan's Fund for Blindfold Soldiers.	2,58,985	To organize assistance for blinded soldiers and teach them wage-earning occupations.
21	The Bengal Ambulance Corps Fund.	2,76,568	To provide the outfit necessary for the Bengal Ambulance Corps.
22	The Royal Silver Wedding Fund.	1,26,671	To commemorate the silver wedding of their Imperial Majesties the King-Emperor and the Queen-Empress by providing educational scholarships for the children of Indian soldiers killed in the war.
23	The Bishop Thorgom's Fund for Armenian Relief.	88,456	To assist homeless and destitute Armeoians.
24	The War Seal Fund ...	11,360	To supply comforts to soldiers and to the sick and wounded.
25	The St. John Ambulance Brigade (Nursing Sisters (Freighting and Speeding Corp.).	1,64,990	To assist invalided soldiers passing through the railway stations of Calcutta by giving them free refreshments, warm clothing for cold climates and other comforts for their journeys.
26	The St. John Ambulance Brigade (Nursing Sisters Convalescent Home, Calcutta).	1,41,632	To pay for the upkeep of a convalescent home for British soldiers in Calcutta.
27	The Soldiers' Club, Darjeeling.	13,548	To provide amusements and recreation for soldiers in Darjeeling.
28	The Soldiers' Club, Hastings, Calcutta.	31,200	To provide amusements and recreation for the soldiers at Hastings in Calcutta.
29	The Kurseong Soldiers' Canteen Fund, Kurseong.	11,957	To provide soldiers with free meals on their way up and down from Darjeeling.
30	The Star and Garter Fund	4,025	For equipping the Star and Garter Hospital at Richmond.

STATEMENT II.

A statement of important war contributions in cash made direct to Government.

Serial No.	NAME OF DONOR.	Amount.	How utilized.	
		Rs.		
1	Raja Sarat Chandra Ray (Chaudhuri, of Chanchal, Muhla.	50,000 ¹	Credited to the "Our Day" Fund, Bengal Branch, at the instance of the Bengal Government.	
2	Mr. R. D. Mehta, Bally- gunge, Calcutta.	25,000	Credited to the Government of India, Army Department, towards the general expenses of the war. ²	
3	Rai Baldeo Das Birla Bahadur, Calcutta.	25,000	Credited to the Imperial Indian Relief Fund (Central Fund) at the instance of the Government of India.	
4	Babu K. B. Ray and Babu R. B. Ray, of Pabna.	25,000 ¹	Credited to the Government of India, Army Department, towards the general expenses of the war.	
5	Anonymous ...	12,000 ²	Ditto	ditto. ³
6	The Hon'ble Maharaja Sir Manindra Chandra Nandi, K.C.I.E., of Kasimbazar, Mushidabad.	10,000 ²	Ditto	ditto.
7	Raja Satya Niranjan Chakrabatti, of Hetam- pur, and his brother Mr. M. N. Chakrabatti, Birkhann.	10,000	Ditto	ditto.
8	The Hon'ble Rai Sita Nath Ray Bahadur, Bhagyakul, Dacca.	10,000 ²	Ditto	ditto.
9	Mr. Manindra Chandra Sinha, M.B.E., Paikpara, 24-Parganas.	1,000 ²	Ditto	ditto.

¹ In war bond.

² Annually from 1918 for so long as the war lasts.

³ The donor wishes to remain anonymous.

STATEMENT III.

A statement of valuable gifts in war material and in kind.

Serial No.	DISTRICT.	Number.	By whom given.
A. -Motor Ambulance Cars.			
1	24-Parganas ...	1	The people of the 24-Parganas district.
2	Khulna ...	1	Local organizations of the Khulna district.
3	Murshidabad ...	2	The Hon'ble Maharaja Sir Manindra Chandra Nandi, K.C.I.E.
4	Ditto ...	1	The people of the Murshidabad district.
5	Ditto ...	1	The Nawab Bahadur of Murshidabad.
6	Nadia ...	1	The Midnapore Zamindary Company.
7	Pirbhumi ...	5	Raja Satya Niranjan Chakrabatti and others.
8	Hooghly ...	7	The people of the Hooghly district (through the district branch of the St. John Ambulance).
9	Burdwan ...	2	The Raniganj and Giridih Coal Fields War Motor Ambulance Fund.
10	Dacca ...	1	The Dacca Ladies' War Fund.
11	Mymensingh ..	6	Raja Sashi Kanta Acharya Chaudhuri Bahadur, of Mymensingh.
12	Darjeeling ...	2	The Darjeeling Planters' Association.
13	Calcutta ...	1	Rai Baldeo Das Birla Bahadur and Babu Radha Kissan Poddar of the firm of Messrs. Baldeo Das Jugal Kishore and Tarachand Ghansyam Das.
14	Ditto ...	1	Rai Badree Das Bahadur.
15	Ditto ...	50	The Calcutta public (through the Calcutta War Fund Committee).
16	Hill Tippera State ...	1	His Highness the Maharaja of Hill Tippera.

Serial No.	DISTRICT.	Number.	By whom given.
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B.—Motor Ambulance Launches.

1	Hooghly ...	2	The people of the Hooghly district (through the District Branch of the St. John Ambulance Association).
2	Dacca ...	2	The people of the Dacca district.
3	Jalpaiguri ...	1	The Duars Tea Planters
4	Hill Tippera State ...	1	His Highness the Maharaja of Hill Tippera.
5	Calcutta ...	1	Dr. S. P. Sarbadhikari, C.I.E.

C.—Motor-cars.

1	Hooghly ...	1	Babu Sarat Kumar Mukharji.
2	Jalpaiguri ...	1	P. D. Raikat, Esq.
3	Calcutta ...	1	The Hon'ble Mr. Bhupendra Nath Basu.

D.—Lorries.

1	24-Parganas ...	1	The people of the 24-Parganas district.
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E.—Tents.

1	Jalpaiguri ...	2	P. D. Raikat, Esq.
2	Cooch-Bihar State ...	7	His Highness the Maharaja of Cooch-Bihar.

F.—Important war comforts.

1	Darjeeling ...	4,000 lbs. of tea.	R. H. A. Morton, Esq., of Teonbarrie Tea Estate.
2	Hill Tippera State ...	800 khaki shirts.	His Highness the Maharaja of Hill Tippera.

STATEMENT IV.

A statement of contributions in man-power, etc.

The Bengal Stationary Hospital.—The Indian community of Bengal fitted out a river flat as a hospital, but unfortunately she sank in a gale off the coast of Madras on her way to the Persian Gulf. Thereafter the Committee offered to utilise the *personnel* and equipment acquired for the floating hospital in any way in which the military authorities decided. The offer was accepted, and the Committee were asked to arrange for a Stationary Hospital of 200 beds in Amara for a period of six months. This was done, and the Committee further increased the accommodation to 1,000 beds. The corps rendered excellent service, but it was subsequently disbanded and returned to India in July 1916, the hospital being taken over by the military authorities as a going concern.

The Bengal Ambulance Corps.—In view of the success of the Bengal Stationary Hospital in Mesopotamia, it was suggested to the Committee of the hospital that Government should take over the hospital, and that the promoters should develop a bearer corps along the lines of an ambulance bearer company. This was accepted, and Dr. Sarbadhikari recruited the necessary men for the ambulance corps. At the suggestion of the medical authorities, the promoters of the Bengal Ambulance Corps undertook to develop an ambulance bearer corps of 135 officers and men. The organization was all but completed, but owing to a misunderstanding between the promoters of the corps and the military authorities regarding the status and nomenclature of the various ranks, the corps was never actually formed, and the men enlisted were disbanded at the end of June 1916.

The Calcutta Volunteer Battery.—The formation of this battery was sanctioned by Government soon after the outbreak of the war. It consisted of 114 officers and men raised in Calcutta from the Cossipore Artillery Volunteers and the Calcutta Port Defence Volunteers. This force was despatched to East Africa and reinforcements were sent there from time to time. The force returned to India after having rendered service for about two years.

The Calcutta Motor Machine-gun Battery.—A battery was organized consisting of 60 young men employed in jute mills and offices in and around Calcutta. The cost of its equipment was met by subscription and the battery was despatched to Egypt in 1916. It was demobilised at the end of 1917, and most of the members were transferred to other units of the Machine-gun Corps in Egypt. A proposal to revive the battery was being favourably considered by the military authorities when hostilities ceased.

Anglo-Indian Regiment.—To this all-India voluntary regiment sanctioned for the duration of the war for members of the domiciled Anglo-Indian community, Bengal contributed a proportionate complement of men.

Calcutta University Corps.—In December 1917 the Government of India, in compliance with the wishes of the Indian student community of Bengal, sanctioned the formation in the University of Calcutta of a wing of the Indian Defence

Force to be designated the Calcutta University Infantry. The total number of applicants was 1,099, of whom 511 were enrolled. The corps has been under-training.

Bengal Light Horse.—In 1917 the Government of India sanctioned the attachment to the Indian Defence Force of a cavalry unit composed of well-to-do Indians. Two hundred and eight members were enrolled and the corps underwent training.

Indian Section of Indian Defence Forces.—In 1917 a proposal to form a corps in the Indian Defence Force of non-European British subjects, 1,000 strong, was sanctioned by the Government of India under the title 4th Calcutta Infantry. Two hundred men enrolled themselves, and 99 of these offered themselves for preliminary training.

Combatant recruitment—

			Number.
Men recruited for the 49th Bengal	...	...	5,583
Ditto for Motor Transport	...	...	162
Ditto as signallers	...	...	107
Ditto for the Artillery	...	...	133
Ditto for other units	...	...	8
Ditto as followers	...	...	193

Non-combatant recruitment—

			Number.
Men recruited by the Divisional Recruiting Officer for Labour and Porter Corps, etc.	...	...	15,592
Men recruited by the Technical Recruiting Officer for the East African and Mesopotamian Railways and the Inland Water Transport Service	...	...	47,365
Men recruited from convict volunteers as sweepers, labourers, etc.	...	...	657
Men recruited as lascars crews and sent to outports	...	...	40,656

Other Contributions.—A large number of motor-cyclist, despatch riders, interpreters, signallers, motorboat drivers, motor transport drivers and men in the St. John Ambulance Corps were sent to the front from the 2nd (Presidency) Battalion of the Calcutta Volunteer Rifles.

APPENDIX V.

His Excellency's Address to the District Boards of Nadia, Jessore and 24-Parganas on the 29th January 1918, on the subject of certain drainage projects.

GENTLEMEN,

FIRST of all let me thank you for having responded so readily to my invitation to you to meet me here to-day. I can well believe that some of you—perhaps many of you—may have been put to some inconvenience, in doing so; and I should not have asked you to put yourselves to the trouble of coming to Calcutta, had it not been that I attach unusual importance to the subject which I desire to discuss with you.

I had occasion recently to address the members of the District Board at Burdwan; and in the course of my speech to them I said that one of the ambitions which I cherished was to see during my tenure of office a big advance in our fight against disease, and I added that my study of conditions in Bengal had made it clear to me that it was the District Boards whose interest and co-operation I must enlist, before I could hope to achieve any measure of success. I have referred to these utterances because they provide the explanation of my invitation to you to meet me here to-day. The particular disease with which I propose to concern myself this morning is malaria. It is not the only disease that I desire you to help me to fight; but it is, perhaps, the most widespread and the most virulent of all the diseases which afflict the people of Bengal. Its baneful influence was impressed upon me in more than one of the addresses of welcome which were presented to me on my arrival in Calcutta to take over the duties and responsibilities of Government, less than a year ago. I lost little time in enquiring into the nature of the scourge and I frankly confess that I was shocked at the grim tragedy which my enquiries disclosed. Every year there occur in Bengal from 350,000 to 400,000 deaths from this cause alone. But a mere enumeration of the deaths gives but a faint idea of the ravages of the disease. It is probable that at least a hundred attacks of malaria occur for every death, and it is estimated that this disease alone is responsible for 200,000,000 days of sickness in the Presidency every year. This gives an idea of its results from an economic point of view. Its spectral finger may also be traced in the diminution of the birth-rate, as well as in the increase of the death-rate, with the result that in the worst malarial districts the population shows a serious decline. The state-of-affairs is summed up in the Bengal Census Report of 1911 in the following words:—

"Year by year fever is silently at work. Plague slays its thousands, fever its ten thousands. Not only does it diminish the population by death, but it reduces the vitality of the survivors, saps their vigour and fecundity, and, either interrupts the even tenor, or hinders the development of commerce and industry. A leading cause of poverty—and of many other disagreeables in a

great part of Bengal—is the prevalence of malaria. For a physical explanation of the Bengali lack of energy, malaria would count high."

I am aware that all vital statistics here must be approached with caution owing to the extreme unreliability of the reporting agency. In a small Bengal town an enterprising Deputy Sanitary Commissioner, who went from house-to-house to verify the recorded deaths, found that out of twenty deaths ascribed to fever, three only were due to malaria. Of the others, two had not in fact died at all, one had died of convulsions, one of dropsy, one of bronchitis, and the remainder of various complaints including old age. In another investigation made by an Indian Medical Service Officer, one reported death from fever turned out to be a birth (registered as a death by mistake), four others proved to be still-births, five others to be due to dropsy, two to earache, two to old age and one turned out to be a case of death by burning! No wonder that the Sanitary Commissioner recently observed in one of his reports that "in Bengal the record of deaths is not complete, neither is the statement of cause accurate;" or that we find it officially stated that "the term *fever* commonly used in the official returns is really of little greater value as affording an idea of the actual cause of death than the heading 'other causes'".

In the figures which I have given these inaccuracies on the part of the reporting agency have been allowed for; and I have only referred to them in order to emphasize the fact that the picture which I have painted is not an exaggerated one, but gives as true a representation of the facts as it is possible to obtain on a statistical basis.

Figures of this kind are sufficient to bring home to one how the disease in its endemic form gnaws steadily and relentlessly into the vitality of the people. But it also sweeps down in sudden savage fury as an epidemic, and marks its visit with a virulence more dramatic by far than that of the steady persistence of the endemic variety. I am tempted to quote the description given by Dr. Bentley of an epidemic of malaria in a village in Ferozpur which he visited in the autumn of 1912. "In many cases", he wrote, "every member of a household was prostrated at the same time, and in other cases perhaps one member had escaped. . . . Systematic investigatory work was difficult owing to the scores of people who besieged the camp seeking treatment. In a comparatively short time over 80,000 quinine tablets were distributed. The mortality was considerable. In one case a whole family had died. Another family of eleven lost seven members in two months. A remarkable feature was the hopeless attitude of the people who appeared cowed, not so much by the acuteness of the fever, as by the succession of the relapses". Can one ask for a more vivid picture of the awful tragedy of malaria than that?

Such, then is the problem; and the question facing Government is this—"What are the conditions which produce malaria, and are they such as can be altered by Government action?" Thanks to the discovery of the malarial organism by Professor Laveran in 1880, and to the working out of the mosquito cycle of the parasite by Ross in 1897-98, we now know the cause of the disease and the conditions which are responsible for its spread. The cause of

the disease is the introduction into the blood of a minute unicellular animal parasite. This is conveyed to man in one way, and in one way only, namely, by the bite of the anophelos mosquito.

If this be the case, it is obvious that if the anopheles mosquito can be got rid of, malaria will gradually die out. The destruction of an insect so widespread and so prolific as the mosquito is no doubt a formidable undertaking; and the method most likely to be effective is to bring about conditions which are unfavourable to its breeding. The fundamental question then resolves itself to this—Can an environment in which the mosquito now multiplies freely be so changed as to render it unsuitable to continued breeding?

The mosquito breeds in water. If there was no water, there would be no mosquitoes. There are no mosquitoes in the middle of a waterless desert. If you could dry up Bengal, mosquitoes would very soon disappear. But you cannot, of course, dry up Bengal. You might as well try to dry up the sea. In a country which is naturally a dry country like the Punjab, for instance, you may set to work to remove all superfluous water by draining the country. And this is no doubt the way to set to work in such countries. This method has, in fact, been adopted with complete success at Ismailia. The town has been drained and all the pools of stagnant water dried up. In 1891, there were 2,500 cases of malaria. In 1902, the drying up of the town was undertaken and since 1906 not a single case of malaria has been contracted there. In Bengal, however, some other method of destroying the larvæ must be devised. The problem is complicated by the fact that there are three varieties of anopheles in Bengal, each of which is a carrier of malaria and each of which breeds under dissimilar conditions. Thus the *Anopheles Listoni* breeds in running water, such as small-streams, and is found in the Duars. Another variety known as the *Anopheles Culicifacies* breeds in water having a mild current, and is found in undulating country, such as the Asansol Subdivision of Burdwan; while the third variety, namely, the *Anopheles Fuliginosus*, breeds in stagnant water and is common throughout the deltaic tracts of the Presidency.

In the Duars, malaria increased with the clearing of the country. This is attributed to the fact that the *Anopheles Listoni* breeds much more successfully in streams which are open to daylight than in water darkened by the undergrowth of the forest. When the forest was cleared and the sun light let in the larvæ showed an alarming increase. The remedy in the case would therefore, appear to be to conduct the streams underground; and an experiment on these lines is being carried out on the Meenglas Tea Estate in the Jalpaiguri district. Under drains have been constructed below the natural beds of the streams running through an area of about 600 acres surrounding a coolie village which forms the centre of a rough circle of about half a mile radius.

Another experiment in sub-soil drainage is also being undertaken in the neighbourhood of the Singaram river in the Asansol Subdivision, where the *Anopheles Culicifacies* is prevalent. In this case a combination of methods is being adopted. The Singaram river is being subjected to periodical flushing with a view to

washing away the larvæ found along its margin; and sub-soil drains are being constructed under certain swampy patches and under the bed of a small affluent of the Singaram river.

In the flat deltaic tracts which form the greater part of Bengal, the disease carrier is the *Anopheles Fuliginosus* which breeds in stagnant water. It is here that methods other than simple draining must be devised.

Experience has shown that small shallow pools with a large amount of *edge* are the most favourable breeding places of the *Anopheles Fuliginosus*. Large sheets of water are much less favourable. This may be due to a variety of causes, one of which is undoubtedly that the temperature of large expanses of water is higher than that of small pools. Some interesting facts in this connection are communicated by Captain Hodgson, I.M.S., and are to be found in the Proceedings of the Lucknow Sanitary Conference of 1914. According to this investigator the optimum temperature for the larvæ of the *anopheles* lies between 68°-78° F., temperatures above 80° F. become more and more unsuitable while temperatures of 95° to 104° are rapidly fatal. In Delhi and Madras, the temperatures during the monsoon varied in surface pools from 73° to 104°; the coolest pools being *very small pools* lying amongst grass. Small hoof marks in grass, he declared, might contain water 9° F. cooler than a large pool 6 inches away. "The great destroyer of mosquito larvæ is nature, and her principal means is raising the temperature of the water". If then you cannot get rid of the water, the next best thing to do is to change its character, that is to say, to convert the numberless small shallow pools with a maximum of edge and a comparatively low temperature into large expanses of water with a minimum of edge and a higher temperature. The water which covers the land, especially during the wet season, is derived from two sources, viz., spill water from the rivers and rain. Under these circumstances the object which we have in view can be achieved by holding up the water on the land during the wet months, in other words, by flooding the country; and by draining off the floods at suitable seasons. To do this satisfactorily we must call in the Engineer, and get him to construct the necessary embankments and sluices. If by these means we can regulate the amount of water on a given area of land, we can not only bring about conditions which are unfavourable to the breeding of the mosquito; but we can also guard against damage being done to the crops, and, indeed, we can enormously improve the crops. By a fortunate dispensation of Providence, the staple crops of Bengal—jute and rice—are crops which grow in standing water, and if we regulate the inflow and the efflux of the water scientifically, we can not only destroy the mosquito larvæ and maintain a level of water suitable for the production of good crops, but we can actually improve the fertility of the land by allowing the inflowing water to deposit its silt upon the soil. The remarkable results which can be achieved, in this direction, are strikingly demonstrated in the case of the Magra Hât scheme. I have recently inspected the country between Magra Hât and Diamond Harbour, and I have been deeply impressed with the vast possibilities which may be expected to follow from the introduction of similar schemes in other parts of the Presidency. Into the

details of the scheme I need not enter. They are probably well-known to some, at least of those who are present: but I do urge you to study the results of that scheme, for they afford proof of the really remarkable change for the better which can be brought about by local authorities under the provisions of the Sanitary Drainage Act. Before the scheme was carried out, Mr. Whitfield, the Executive Engineer, reported of the country round Magra Hât as follows:—

"For want of drainage and protection the production of the locality is only a fraction of what it should be Fever is constantly present in every village"

In November 1904, the first sod of the drainage works was cut. In June 1909, the Diamond Harbour sluice was opened for drainage and the whole area affected was cropped for the first time. The area benefited extended to 283 square miles and the cost of the scheme amounted to a little over Rs. 20,50,000. You may say that this is a large sum. So it is. But it has been repaid a hundredfold. It is estimated that the increase in outturn of crops due to the works amounts to no less than Rs. 46½ lakhs a year, or more than twice the total capital cost of the project. And for this truly astonishing result the people benefited are called upon to pay for a period of 30 years only, the modest sum of about nine annas an acre. Moreover, a large part of the money spent on the scheme remained in the district, since the greater number of the 5,000 men at one time employed upon the works were recruited from the locality. The scheme has had the additional advantage of providing the people with excellent communications in the shape of a number of navigable channels and, above all, it has enormously improved the health of the district.

Now I have been a long time coming to the particular proposal that I desire to submit to you. Three schemes, all on the same general lines as the Magra Hât scheme, have been prepared for the districts of Nadia, Jessore and the 24-Parganas. These projects may conveniently be known as the Jaboona, the Arni Bhil and the Nowi-Sunthi schemes. They are all schemes which have been drawn up for execution under the Sanitary Drainage Act. They have been designed under the direct supervision of Mr. Addams-Williams in consultation with Mr. Bentley; and I have myself visited a part of the area which will be affected by them, accompanied by Mr. Cowley and Mr. Addams-Williams. They will, of course, require considerable capital outlay; but with the example of Magra Hât scheme before us, we may confidently expect that they will, within a comparatively short time, more than repay the expenditure incurred. Under these circumstances it would not be unreasonable, I think, to ask those who will be directly benefited to finance them by loans in accordance with the provisions of the Sanitary Drainage Act. I am anxious, however, that Government should give practical proof of its sympathy with the District Boards and zamindars in matters of this kind, and, with this object in view, I am prepared to offer them such financial assistance as the circumstances of the time will permit.

The Jaboona scheme is designed to regulate the surface water over an area of about 350 square miles—an area considerably larger, that is to say, than that affected by the works at Magra Hât. I cannot at present give you a final

estimate of the cost of this scheme; but you may take Rs. 8,00,000 as an approximate figure.

If the District Boards and the zamindars concerned are willing to undertake this project under the Sanitary Drainage Act, I am prepared to make a Government grant of Rs. 1,50,000 towards the total cost, and I have made provision for that amount in the budget for the coming year.

The Amul Bhil scheme will serve an area of about 53 square miles in the Jessore district and will probably cost about Rs. 1,72,000 in all. On the assumption that the District Board will take up this scheme, I am prepared to make a Government grant of Rs. 75,000 towards the cost and have made provision to this extent in the budget.

The last of the three schemes which I have mentioned this morning, namely, the Nowi-Sunthi scheme, will serve an area in the 21-Parganas. This scheme has already been under the consideration of the District Board. The details of the project have, however, recently been revised, and the scope of the scheme has been extended so as to include the area of the Burthi Bhil. The total cost will probably be about Rs. 16,00,000 and towards this the District Board has already received from Government a grant of Rs. 2,00,000.

Now I venture to express the earnest hope that you will agree to take up these projects, and that if you do, you will lose no time in putting the machinery of the Sanitary Drainage Act into motion. The procedure involves the appointment of Drainage Commissioners, the hearing of objections, and so on, and some time must necessarily be occupied in the transaction of these preliminaries. Well, when I think of the ravages of malaria which may be mitigated by these works, I confess that I am impatient of delay, and it is largely because I desire, so far as possible, to reduce delay, that I have made you the offer of the Government grants of which I have spoken to-day. While the machinery of the Sanitary Drainage Act is being set in motion, work on the schemes can actually be begun with the money which I am prepared to provide in the budget during the coming year.

Believe me, we are in earnest in this matter. There are important steps in our campaign against malaria which Government may properly be expected to finance themselves. A number of these we intend to take during the coming year. We are making provision for a special staff to carry out a detailed malaria survey in the areas covered by our drainage schemes. We are undertaking surveys and investigations preparatory to the preparation of further projects, such as the Harihar, the Balli Bhil, the Blairah and the Dhunia schemes. We are arranging to finance a number of smaller undertakings to be executed by the Sanitary Engineer, such as the Meenglas, the Singaram, the Jangipur, the Nawabganj town and the Faridpur town Anti-malaria schemes. And we also hope to complete our scheme in the neighbourhood of Edilpur and to make a good start during the year with the following projects:—The Saraswati, the Barsagachia, the Chapra Bhil and the Manikhati.

But as I have said, when it comes to the construction of works on a large scale affecting particular areas, it is not possible for Government to provide the

capital required in the shape of Government grants. Nor, indeed, would it be equitable, even if it were possible. The great benefits which such schemes may confer, are enjoyed by the people of the locality, and not by the people of the Presidency, as a whole; and it is only right that those in whose interests the schemes are conceived, should make themselves responsible for the greater part of the expenditure incurred.

We are asking the educated classes of Bengal to join hands with Government in working for the good of the Presidency. In the case of two of the districts affected by the schemes which I have been discussing this morning, we have, within the last few weeks, invited the members to elect an Indian gentleman to take over from the District Officer, the duties and responsibilities which devolved upon him as Chairman of the District Board.

Am I then claiming too much, when I say that by inviting their assistance in this matter, I am providing them with an admirable opportunity of making memorable in the annals of their districts their assumption of the cares and responsibilities of their new office?

That, I think, is all that I have to say. I am afraid that I have made a somewhat large demand upon your patience. It is sometimes said that Government are indifferent to the advantages of taking the public into their confidence. I am most anxious to share with you my hopes and my desires, because I feel that it would be unreasonable on my part to expect your wholehearted co-operation, unless I were to do so. And this must be my excuse for having made so large a claim upon your indulgence. For the extent of that indulgence I tender you my thanks

